

June 10, 2021

Mr. David Reed
Chevron USA Inc.
PO Box 1392
Bakersfield, CA 93302

Re: Notice of Preliminary Decision – Title V Permit Renewal
Facility Number: S-1128
Project Number: S-1153625

Dear Mr. Reed:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Chevron USA Inc. at the Heavy Oil Western Stationary Source in Kern County, California.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,



Brian Clements
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: Laura Yannayon, EPA (w/enclosure) via EPS

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SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation
Chevron USA Inc
S-1128

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TITLE V PERMIT RENEWAL EVALUATION
Heavy Oil Production Operation

Engineer: John Yoshimura

Date: June 8, 2021

Facility Number: S-1128
Facility Name: Chevron USA Inc.
Mailing Address: PO Box 1392
Bakersfield, CA 93302

Contact Name: Greg Pritchett
Phone: (661) 654-7796

Responsible Official: David Reed
Title: Operations Superintendent

Project # : S-1153625
Deemed Complete: August 26, 2015

I. PROPOSAL

Chevron USA Inc. (CUSA) was issued a renewed Title V permit on January 17, 2012. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

II. FACILITY LOCATION

Chevron USA Inc. is located at Heavy Oil Western Stationary Source in Kern County.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules updated or evaluated during this current renewal review interval (1/17/12 to present)

- District Rule 2020 Exemptions
(amended December 18, 2014)
- District Rule 2201 New and Modified Stationary Source Review Rule
(amended August 15, 2019)
- District Rule 2410 Prevention of Significant Deterioration
(adopted June 16, 2011)
- District Rule 2520 Federally Mandated Operating Permits
(amended August 15, 2019)
- District Rule 4306 Boilers, Steam Generators and Process Heaters - Phase 3
(amended December 17, 2020)
- District Rule 4311 Flares
(amended December 17, 2020)
- District Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters greater than 5.0 MMBtu/hr
(amended December 17, 2020)
- District Rule 4601 Architectural Coatings
(amended April 16, 2020)
- District Rule 4702 Internal Combustion Engines
(amended November 14, 2013)
- 40 CFR 60 Subpart GG New Source Performance Standards; Standard of Performance for Stationary Gas Turbines
(amended February 27, 2014)
- 40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
(amended July 7, 2016)

- 40 CFR Part 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
(amended June 3, 2016)
- 40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
(amended March 6, 2013)
- 40 CFR Part 82 Subpart B Servicing of Motor Vehicle Air Conditioners
(amended June 25, 2013)
- 40 CFR Part 82 Subpart F Recycling and Emissions Reductions
(amended December 1, 2016)

B. Rules removed during this current renewal review interval (1/17/12 to present)

None

C. Rules added during this current renewal review interval (1/17/12 to present)

Following rules are that are applicable to operation of this facility has been adopted since issuance of the initial Title V permit.

- District Rule 2410 Prevention of Significant Deterioration
(effective November 26, 2012)

D. Rules not updated during this current renewal review interval (1/17/12 to present)

- District Rule 1070 Inspections
(amended December 17, 1992)
- District Rule 1080 Stack Monitoring
(amended December 17, 1992)
- District Rule 1081 Source Sampling
(amended December 16, 1993)
- District Rule 1100 Equipment Breakdown
(amended December 17, 1992)
- District Rule 1160 Emission Statements
(adopted November 18, 1992)
- District Rule 2010 Permits Required
(amended December 17, 1992)
- District Rule 2031 Transfer of Permits
(amended December 17, 1992)

- District Rule 2040 Applications
(amended December 17, 1992)
- District Rule 2070 Standards for Granting Applications
(amended December 17, 1992)
- District Rule 2080 Conditional Approval
(amended December 17, 1992)
- District Rule 4001 New Source Performance Standards
(amended April 14, 1999)
- District Rule 4002 National Emissions Standards for Hazardous Air Pollutants
(amended May 20, 2004)
- District Rule 4101 Visible Emissions
(amended February 17, 2005)
- District Rule 4201 Particulate Matter Concentration
(amended December 17, 1992)
- District Rule 4202 Particulate Matter - Emission Rate
(amended December 17, 1992)
- District Rule 4301 Fuel Burning Equipment
(amended December 17, 1992)
- District Rule 4305 Boilers, Steam Generators and Process Heaters - Phase 2
(amended August 21, 2003)
- District Rule 4401 Steam Enhanced Crude Oil Production Wells
(amended June 16, 2011)
- District Rule 4623 Storage of Organic Liquids
(amended 5/19/05)
- District Rule 4701 Internal Combustion Engines – Phase I
(amended August 21, 2003)
- District Rule 4703 Stationary Gas Turbines
(amended September 20, 2007)
- District Rule 4801 Sulfur Compounds
(amended December 17, 1992)
- District Rule 8011 General Requirements
(amended August 19, 2004)

- District Rule 8021 Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities
(amended August 19, 2004)
- District Rule 8031 Bulk Materials
(amended August 19, 2004)
- District Rule 8041 Carryout and Trackout
(amended August 19, 2004)
- District Rule 8051 Open Areas
(amended August 19, 2004)
- District Rule 8061 Paved and Unpaved Roads
(amended August 19, 2004)
- District Rule 8071 Unpaved Vehicle/Equipment Traffic Area
(amended September 16, 2004)
- 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
(adopted 2/16/12)
- 40 CFR Part 61 Subpart M – National Emission Standard for Asbestos
(amended 9/18/03)
- 40 CFR Part 64 Compliance Assurance Monitoring
(amended 10/22/97)
- Title 17 California Code of Regulations (CCR) Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines
(adopted February 26, 2004)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

A. Rules Added

There are no new rules that are not federally enforceable being added at this time.

B. Rules Not Updated

- District Rule 4102, Nuisance (as amended December 17, 1992)

For this facility, condition #43 of the facility wide requirements S-1128-0-3; condition #4 of '-18-36; condition #3 of- and '-75-24; condition #2 of '-76-25; condition #3 of '-77-23, condition #3 of '-949-4 and '-951-4, conditions #3 and 5 of '-957-2; condition #3 of '-959-1 and '-960-1; conditions #4 and 7 of '-978-2; conditions #4 and 6 of '-979-1; condition #4 and 6 of '-980-1; condition #2 of '-991-4 and '-992-4, condition #6 of '-996-2, condition #3 of '-1004-4, condition #1 of '-1028-2, and condition #1 of '-1029-2 are based on District Rule 4102 listed above and is not Federally Enforceable through Title V.

- Title 17, California Code of Regulations, Section 92000 through 92540

No changes were made to these rules since the renewed Title V permit was issued, therefore, they will not be discussed any further.

1. Title 13 CCR, Section 2423 - Exhaust Emission Standards and Test Procedures, Off-Road Compression-Ignition Engines and Equipment

This regulation specified emission standards for off-road compression-ignition engines, based on the engine's model year and maximum power rating.

The following conditions are jointly based on this regulation and other federally enforceable rules. The conditions are therefore not federally enforceable through this rule:

Permit Unit	Condition #s
S-1128-951-4	4 and 5
S-1128-957-2	4 and 5
S-1128-978-2	6 and 7
S-1128-979-1	5 and 6
S-1128-980-1	5 and 6

The following condition is entirely based on this rule and is therefore not federally enforceable through Title V:

Permit Unit	Condition #s
S-1128-949-4	5

2. Title 17 CCR, Section 93115 - Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines

The Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI) Engines is a rule under the California Code of Regulations (CCR), which is the official compilation and publication of the regulations adopted, amended or repealed by state agencies. The purpose of this ATCM is to reduce diesel particulate matter (PM) and criteria pollutant emissions from stationary diesel-fired engines.

The following conditions are jointly based on this rule and other federally enforceable rules. The conditions are therefore not federally enforceable through this rule:

Permit Unit	Condition #s
S-1128-0-3	168, 169, 170, 171, and 172
S-1128-305-5	2
S-1128-306-6	2
S-1128-307-5	2
S-1128-949-4	4 and 6
S-1128-951-4	4, 5, and 6
S-1128-955-2	2, 3, 4, 5, 11, 14, and 15
S-1128-956-2	2, 3, 4, 5, 11, 14, and 15
S-1128-957-2	4, 5, and 6
S-1128-978-2	5, 6, and 7
S-1128-979-1	5 and 6
S-1128-980-1	5 and 6

The following condition is entirely based on this rule and is therefore not federally enforceable through Title V:

Permit Unit	Condition #s
S-1128-949-4	5

VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the initial Title V permit or most recent renewal of the Title V permit.

Dormant Emission Units

Permit units S-1128-6-19, '-11-20, '-17-31, '-26-41, and '-56-20 are currently out of operation and are designated as dormant emission units by District Permit conditions. Permit conditions have been added to these permit units requiring that an Authority to Construct permit must be acquired before the facility operates the units. In addition, the facility will be required to submit an application to comply with Title V requirements of District Rule 2520 prior to operating. Therefore these permit units will not be evaluated further in this permitting action.

A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

B. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this Title V permit was last renewed. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit. The updated requirements of this rule are therefore not applicable at this time.

C. District Rule 2410 - Prevention of Significant Deterioration

District Rule 2410 has been newly adopted since this Title V permit was last renewed. However, the requirements of this rule are only triggered at the time the source undergoes a modification. The requirements of this rule cannot be triggered by the renewal of a Title V permit, since permit renewal does not involve any construction or modification of the stationary source. Therefore, the newly adopted requirements of this rule are not applicable at this time.

D. District Rule 2520 - Federally Mandated Operating Permits

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

E. District Rule 4306 - Boilers, Steam Generators, and Process Heaters – Phase 3

This rule limits emissions of oxides of nitrogen (NO_x) and carbon monoxide (CO) from boilers, steam generators, and process heaters. The Rule is applicable to gaseous or liquid fuel-fired boilers, steam generators, or process heaters with a heat input greater than 5 million Btu per hour. The rule was recently amended on December 17, 2020.

The amended Rule requires boilers, steam generators, and process heaters to meet the applicable NO_x and CO limits listed in Table 2 on or after December 31, 2023 or December 31, 2029, depending on the category of the unit. The facility must submit an emission control plan and apply for Authority to Construct permits to modify their units subject to this Rule by May 1, 2022 or May 1, 2028, to comply with the revised emission limits.

The boilers, steam generators, and process heaters at this facility comply with the current emission limit requirements of Rule 4306 listed in Table 1. Table 2 requirements are not in effect yet. Therefore, no changes to the permits are required to the permits at this time since the units and their current permits comply with all current Rule 4306 requirements. An Authority to Construct and emission control plan will be submitted in the future to address the Table 2 emission limits, as applicable to each unit.

F. District Rule 4311 - Flares

This rule limits emissions of volatile organic compounds (VOC), oxides of nitrogen (NO_x) and carbon monoxide (CO) from flares. This rule is applicable to operations involving the use of flares. The rule was recently amended on December 17, 2020.

The amended Rule removed the exemption for flares operating at sources that emit less than 10 tons per year of both VOC and NO_x. This change has no effect on Chevron, since Chevron's emission rates are greater than 10 tons/day for each of these pollutants. The rule amendment requires operators of flares to meet the flare annual throughput thresholds in Table 2, or to meet revised VOX and NO_x emission requirements listed in Table 3. The changes begin to come into effect on December 31, 2023. The facility is required to submit an Authority to Construct permit to comply with the future requirements by July 1, 2022.

The flares at this facility comply with the current emission limit requirements of Rule 4311 listed in Table 1. Table 2 and Table 3 requirements are not yet in effect. Therefore, no changes to the permits are required to the permits at this time since the units and their current permits comply with all current Rule 4311 requirements. An Authority to Construct and emission control plan will be submitted in the future to address the Table 2 and Table 3 requirements, as applicable to each unit.

G. District Rule 4320 - Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr

This rule limits emissions of oxides of nitrogen (NO_x) and carbon monoxide (CO), oxides of sulfur (SO₂), and particulate matter 10 microns or less (PM₁₀) from boilers, steam generators, and process heaters. The Rule is applicable to gaseous or liquid fuel-fired boilers, steam generators, or process heaters with a heat input greater than 5 million Btu per hour. The rule was recently amended on December 17, 2020.

The amended Rule requires boilers, steam generators, and process heaters to meet the applicable NO_x limits listed in Table 2 on or after December 31, 2023. The facility must submit an emission control plan and apply for Authority to Construct permits to modify their permit for units subject to this Rule by December 31, 2021 to comply with the revised emission limits.

The boilers, steam generators, and process heaters at this facility comply with the current emission limit requirements of Rule 4320 listed in Table 1. Table 2 requirements are not in effect yet. Therefore, no changes to the permits are required to the permits at this time since they are in compliance with all current Rule 4320 requirements. An Authority to Construct and emission control plan will be submitted in the future to address the Table 2 emission limits, as applicable to each unit.

H. District Rule 4601 – Architectural Coatings

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). The rule was amended in December 17, 2009. Since the following changes included in the latest rule amendment did not result in adding new requirements and/or revising current requirements in the facility-wide permit, no further evaluation is needed.

Section 2.0 — Applicability

The phrase "blends or repackages" was added to rule language to extend the applicability of rule language to facilities involved in those activities.

Section 3.0 — Definitions

Numerous definitions was added, deleted or modified in order to make the amended rule harmonize with definitions and rule requirements presented in the California Air Resources Board (ARB) Suggested Control Measures (SCM).

Section 4.0 — Exemptions

A reporting requirement was added for any architectural coating that is sold in a container with a volume of one liter or less. The exemption for architectural coatings was further defined by adding "coatings that are supplied and offered for sale" to current language, in order to make the rule consistent with the ARB SCM.

Section 5.0 — Requirements

The amended rule implements the recommended VOC limits per the ARB SCM. The following changes were as follows: 15 coating categories were eliminated, ten were added, nineteen coatings categories remained unchanged, and the VOC content limits for 19 categories were lowered.

Section 6.0 — Administrative Requirements

Section 6.1 — Labeling Requirements

Labeling requirements were updated to add new labeling standards consistent with new coatings categories per the SCM.

Section 6.2 — Reporting Requirements

A new section was added to include reporting requirements per the SCM. The SCM contains a new requirement to submit sales data. Collection of this data is authorized in the California Health and Safety Code which requires submission of data to estimate emissions.

Section 6.3 — Test Methods

New sections were added to coincide with new coating categories pursuant to the ARB SCM.

Section 7.0 — Compliance Schedule

This section was updated to account for the new amendments to rule language by adding the phrase "the dates specified within the text of the rule."

Section 8.0 — Averaging Compliance Option

This section was deleted in its entirety.

Conditions #24, 25, and 26 of the draft facility-wide permit (S-1128-0-3) enforce the above requirements.

I. District Rule 4702 - Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SO_x) from internal combustion engines. The rule applies to any internal combustion engine rated at 25 brake horsepower or greater.

This rule has been amended twice from the requirements currently approved in the SIP, once on August 18, 2011 and November 14, 2013. The August amendments served to improve the clarity of the rule, remove expired language and reorganize some rule requirements to other sections of the rule. The NO_x emissions limits were also lowered for certain categories of engines.

The purpose of the November 14, 2013 amendments to Rule 4702 was to make administrative updates to rule language to clarify existing rule requirements by deleting "stationary" from Section 5.2, deleting "the" from Section 5.10.2, adding "and" to Section 7.5.2.1, adding "source" to Section 7.6.2.2, and by adding a line item to Table 2 to clarify that NO_x limits for leanburn waste gas fired engines used exclusively in non-Agricultural Operations (Non-AO) is 65 parts per million by volume (ppmv). This rule amending project did not change existing emissions limits or affect air quality.

Section 4.2 of this rule states that except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an emergency standby engine or low-use engine, provided that the engine is operated with an operating non-resettable elapsed time meter.

Permit units S-1128-305, '-306, '-307, '-949, '-951, '-957, and '-978 are used to power emergency generators, which meets this criteria. Condition #168 of the draft facility-wide permit (S-1128-0-3) enforces the requirement to be equipped with an operating non-resettable elapsed time meter.

Section 4.3 of this rule states that except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

1. The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as fire or flood; and

2. Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and
3. The engine is operated with an operational nonresettable elapsed time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

As previously mentioned, permit units S-1128-305, '-306, '-307, '-949, '-951, '-957, and '-978 are used to power emergency generators and condition #168 of the draft facility-wide permit (S-1128-0-3) enforces the requirement to be equipped with an operating non-resettable elapsed time meter. The following conditions listed in the table below demonstrate compliance with the 100 hours annual operating limit.

Permit Unit	Condition #s
S-1128-305-5, '-306-6, and '-307-5	2
S-1128-949-4, '-951-4, and '-957-2	6
S-1128-978-2	5

Section 5.9, which only applies to the engine that powers the standby emergency electrical generator, requires the following:

1. The operator shall properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.
2. The operator shall monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.
3. The operator shall install and operate a non-resettable elapsed time meter.

Conditions #168, 169, and 171 of the draft facility-wide permit (S-1128-0-3) enforce the above requirements.

Section 6.2.3 states that an operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following:

1. Total hours of operation,
2. The type of fuel used,
3. The purpose for operating the engine,
4. For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and

- Other support documentation as necessary to demonstrate claim to the exemption.

Condition #172 of the draft facility-wide permit (S-1128-0-3) enforces the above requirements.

H. 40 CFR 60 Subpart GG - Standard of Performance for Stationary Gas Turbines

The gas turbines permitted as units S-1128-366-20, '-367-19, '-368-19, '-369-19, '-370-22, '-371-22, '-372-21, '-373-21, '-374-15, '-375-15, '-376-14, '-377-14, '-1028-2, and '-1029-2, are subject to the requirements of this subpart. These requirements and their compliance determination are briefly discussed in the following section.

§60.332 Standard for NO_x

§60.332(c) requires that a stationary gas turbine with a heat input rate greater than 10 MMBtu/hr but less than or equal to 100 MMBtu/hr shall comply with the NO_x emission limit calculated using the following equation:

$$STD = 0.0150 \frac{(14.4)}{Y} + F; \text{ where}$$

STD = allowable ISO corrected NO_x emission concentration in % by volume @ 15% O₂ on dry basis

Y = Manufacturer's rated heat rate at manufacturer's rated load (kJ/w-hr) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The Y shall not exceed 14.4 kJ/w-hr.

F = NO_x emission allowance for fuel-bound nitrogen.
For each gas turbine unit,

$$\begin{aligned} \text{Heat input rate} &= 37.6 \times 10^6 \text{ Btu/hr} \\ \text{Power Rating} &= 2.7 \text{ MW} \end{aligned}$$

$$Y = \left(37.6 \times 10^6 \frac{\text{Btu}}{\text{hr}} \right) \times \left(\frac{1 \text{ kJ}}{0.9478 \text{ Btu}} \right) \times \left(\frac{1}{2.7 \times 10^6 \text{ w}} \right) = 14.7 \frac{\text{kJ}}{\text{w} - \text{hr}}$$

Since Y exceeds 14.4 kJ/w-hr, Y is set equal to 14.4 kJ/w-hr.

F = 0; for conservative calculations

$$STD = 0.0150 \frac{(14.4)}{14.4} + 0 = 0.015\% \text{ by volume @ 15\% O}_2 \text{ (150 ppmv @ 15\% O}_2)$$

Chevron is currently in compliance by limiting their NO_x emissions to 9.0 ppmvd @ 15% O₂ on 3-hour rolling average basis for permit units '-366-20 through '-377 and 5.0 ppmvd @ 15% O₂ on 3-hour rolling average basis for permit units '-1028-2 and '-1029-2. The following conditions listed in the table below demonstrate compliance.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	7
S-1128-1028-2 and '-1029-2	8

§60.333 Standard for SO_x

§60.333(a) requires that emissions of sulfur dioxide shall not exceed 0.015 percent by volume dry @ 15% O₂ (150 ppmvd @ 15% O₂).

The 150 ppmvd @ 15% O₂ limit specified in §60.333(a) is equivalent to 0.764 lb-SO₂/MMBtu. This number is determined as follows:

$$\frac{(150 \times 10^{-6}) \times \left(8,578 \frac{\text{ft}^3}{\text{MMBtu}}\right) \times \left(64 \frac{\text{lb} - \text{SO}_2}{\text{lb} - \text{mol}}\right) \times \left(\frac{20.95}{20.95 - 15}\right)}{\left(379.5 \frac{\text{ft}^3}{\text{lb} - \text{mol}}\right)} = 0.764 \frac{\text{lb} - \text{SO}_2}{\text{MMBtu}}$$

For permit units S-1128-366-20 through '-369-12, the permitted emission factor of 0.002 lb-SO_x/MMBtu (pe is less than that of the maximum allowable emission standard of 0.764 lb-SO_x/MMBtu. For permit units S-1128-370-22 through '-373-21, the permitted emission factor of 0.046 lb-SO_x/MMBtu (pe is less than that of the maximum allowable emission standard of 0.764 lb-SO_x/MMBtu. For permit units S-1128-374-15 through '-377-14, the permitted emission factor of 0.003 lb-SO_x/MMBtu (pe is less than that of the maximum allowable emission standard of 0.764 lb-SO_x/MMBtu. For permit units S-1128-1028-2 and '-1029-2, the permitted emission factor of 0.00233 lb-SO_x/MMBtu (pe is less than that of the maximum allowable emission standard of 0.764 lb-SO_x/MMBtu. Thus, compliance is expected with §60.333(a).

§60.334 Monitoring of Operations

§60.334(b) states that the owner or operator of a stationary gas turbine constructed between October 3, 1977 and July 8, 2004 and using water or steam to control NO_x emissions may, as an alternative to operating the continuous emissions monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine, can install, calibrate, certify, maintain, operate, and quality-assure a continuous monitoring system (CEMS) consisting of NO_x and O₂ monitors.

Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	22, 23, and 24
S-1128-1028-2 and '-1029-2	23, 24, and 25

§60.334(h)(3)(i) and (ii) requires the owner or operator to keep sulfur content records using valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum sulfur content of the fuel is 20 grains/100 scf or less or perform a *representative fuel sampling* to show the sulfur content of gaseous fuel does not exceed 20 grains/100 scf.

Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	5
S-1128-1028-2 and '-1029-2	6

§60.334(j)(1)(iii)(A) defines excess NOx emissions shall be any unit-operating hour in which the 4-hour rolling average NOx concentration exceeds the NOx emission limit calculated in §60.332.

Chevron has proposed to demonstrate compliance with NOx emissions of 9.0 ppmvd @ 15% O₂ on 3-hour rolling average basis, which is considered to be more stringent than the NSPS limit (given above under §60.332 Standard for NOx for each turbine) over 4-hour rolling average period. Therefore, it is not necessary to define excess NOx emissions separately.

§60.334(j)(1)(iii)(B) defines a period of monitor downtime shall be any operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent (or both). Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	33
S-1128-1028-2 and '-1029-2	34

§60.334(j)(2)(i) states for samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling for the unit's storage tank, an excess sulfur dioxide emissions occurs each unit operating hour included in the period beginning on the date and hour of any sample for which sulfur content of the fuel fired in the gas turbine exceeds 0.8% (by weight) and ending on the date and hour that a subsequent sample is taken that demonstrate compliance with the sulfur limit.

Each permit unit has been permitted with a SOx emission rate less than 0.689 lb/MMBtu (0.8 lb-S/100 lb-fuel x 64 lb-SO₂/32 lb-S x 0.0439 lb-fuel/ft³ x ft³/1,020 Btu x 10⁶ Btu/MMBtu). Therefore, it is not necessary to define a less stringent limit.

§60.334(j)(2)(ii) defines excess sulfur dioxide emissions when each delivery of fuel oil has been selected. Each turbine is fired exclusively on natural gas fuel. Thus, requirements of this section are not applicable.

§60.334(j)(5) requires the owner or operator to postmark the reports required under §60.7(c) by the 30th day following the end of each 6-month period. The permittee is required to submit quarterly reports. Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	32
S-1128-1028-2 and '-1029-2	33

§60.335 Test Methods and Procedure

§60.335(a) states that the owner or operator shall conduct the performance tests required in §60.8 using EPA Method 20, ASTM D6522-00 or EPA Method 7E and either EPA Method 3 or 3A to determine NOx and diluent concentration. Sampling traverse points are to be selected following Method 20 or Method 1. Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	19
S-1128-1028-2 and '-1029-2	21

§60.335(b)(1) states that for each run of the performance test, the mean nitrogen oxide emission concentration @ 15% O₂ shall be corrected to ISO standard conditions using the equation listed in this section to demonstrate compliance with NSPS NOx standard. Chevron is required to correct NOx emission concentration to ISO standard conditions in the condition given above. Thus, compliance is expected with this section.

§60.335(b)(2) states that the 3-run performance test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice.

Therefore, the following condition ensures continued compliance:

- To determine compliance with NOx emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)]

§60.335(b)(3) states that for a combined cycle turbine system with duct burner, the owner may elect to measure turbine NO_x emissions after the duct burner rather than directly after turbine. Rule 4703 requires the facility to test the turbine system with duct burner “on” and “off” configurations. Therefore, no further discussion is required.

§60.335(b)(4) states that if water or steam injection is used to control NO_x with no additional post-combustion NO_x control and the owner or operator chooses to monitor the steam or water to fuel ratio then that monitoring system must be operated with each performance test run to determine the fuel consumption and the steam or water to fuel ratio to demonstrate on-going compliance with the NO_x standard.

Each turbine will be equipped with an SCR system, and will have operational CEMS to directly measure NO_x, CO and O₂ concentrations. Therefore, the permittee is not required to monitor fuel consumption and water or steam injection during a performance test.

§60.335(b)(5) states that if the owner elects to claim an emission allowance for fuel bound nitrogen, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed following the applicable procedure described in §60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water or steam to fuel ratio will be valid.

Per <http://www.naturalgas.org/overview/background.asp>, nitrogen content in a natural gas varies between 0-5%. There would not be any significant variation in the NO_x emission limit if the permittee was given an allowance for fuel bound nitrogen. Furthermore, the proposed NO_x emission limit of 9.0 ppmvd NO_x @ 15% O₂ (required by Rule 4703) accounts for the fuel bound nitrogen. Given that this limit is more stringent than that of the NSPS NO_x emission limit, allowance for fuel bound nitrogen is not considered for the fuel used in units in this project.

§60.335(b)(6) states that if the owner or operator elects to install a CEMS, the performance evaluation of CEMS may either be conducted separately or as part of the initial performance test of the affected unit as described in paragraph (b)(7).

Therefore, the following condition ensures continued compliance:

- Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)]

§60.335(b)(7), (b)(8) are not applicable to the turbines in this project.

§60.335(b)(10) if the owner or operator is required to determine the sulfur content of the fuel combusted in the turbine then a minimum of three fuel samples shall be collected during the performance test. Chevron is currently in compliance with these requirements based on the following conditions.

Permit Unit	Condition #s
S-1128-366-20, '-367-20, '-368-20, '-369-20, '-370-20, '-371-20, '-372-20, '-373-20, '-374-20, '-375-20, '-376-20, '-377-20	34
S-1128-1028-2 and '-1029-2	35

J. 40 CFR 60 Subpart IIII - Standards for Performance for Stationary Compression Ignition Internal Combustion Engines

The requirements of 40 CFR 60 Subpart IIII (*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*) applies to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion (IC) engines as specified in Section 60.4200. The subpart applies to owners and operators of stationary CI IC engines that commence construction after July 11, 2005 where the stationary CI ICE are: (i) Manufactured after April 1, 2006 and are not fire pump engines, or (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006. This subpart also applies to owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

This subpart does not apply to the engines permitted as S-1128-305, '-306, '-307, '-949, and '-951 since they were installed prior to July 12, 2005. However, the engines permitted as S-1128-957, '-978, '-979, and '-980 were installed after July 12, 2005 and are subject to this subpart.

Emission Standards for Owners and Operators

§ 60.4205 Emissions Standards for Emergency IC Engine

Section 60.4205(b) states that owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Section 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

Section 60.4202(a) states that Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

Paragraph (a)(1) is not applicable as it applies to engines with a maximum engine power less than 37 KW (50 HP).

Paragraph (a)(2) states for engines greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

The applicable standards from 40 CFR 89.112 are NMHC + NO_x = 4.7 g/kw-hr (equivalent to 3.5 g/bhp-hr), CO = 5.0 g/kw-hr (equivalent to 2.14 g/bhp-hr), and PM = 0.40 g/kw-hr (equivalent to 0.12 g/bhp-hr). As demonstrated in Section VII.B of this evaluation, the emission standards of 40 CFR 89.112 are met. Therefore, the following conditions will be listed on the renewal permits to ensure compliance with these requirements:

S-1128-957-2

- Emissions from this IC engine shall not exceed any of the following limits: 2.33 g-NO_x/bhp-hr, 0.45 g-CO/bhp-hr, or 0.17 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III]
- Emissions from this IC engine shall not exceed 0.06 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III]
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III]

S-1128-978-2

- Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NO_x/bhp-hr, 0.746 g-CO/bhp-hr, or 0.149 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III]
- Emissions from this IC engine shall not exceed 0.082 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III]
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III]

S-1128-979-1

- Emissions from this IC engine shall not exceed any of the following limits: 2.34 g-NO_x/bhp-hr, 0.45 g-CO/bhp-hr, or 0.123 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III]

- Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart IIII]
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart IIII]

S-1128-980-1

- Emissions from this IC engine shall not exceed any of the following limits: 4.04 g-NOx/bhp-hr, 0.522 g-CO/bhp-hr, or 0.213 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart IIII]
- Emissions from this IC engine shall not exceed 0.097 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart IIII]
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart IIII]

The smoke emission standard in 40 CFR 89.113 applies to compression-ignition non-road engines. An emergency-standby IC engine is not a non-road engine as defined in 40 CFR 89 Subpart A, therefore section 40 CFR 89.113 does not apply.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

This section states that owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in sections 60.4204 and 60.4205 over the entire life of the engine. The Tier certified emissions for the engines subject to Subpart IIII at this facility will be listed on the permit as emission factors, ensuring that the emission standards are met over the entire life of this engine.

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

Section 60.4207(b) states that beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. Section 80.510(b) states that beginning June 1, 2010, except as otherwise specifically provided in this subpart, the sulfur content for all non-road diesel fuel shall not exceed 15 ppm. The engines subject to Subpart IIII at this facility will be required to use CARB certified diesel fuel, which meets all of the fuel

requirements listed in this subpart. The following condition is on the proposed facility-wide permit and ensures continued compliance with this section:

- Emergency Standby IC Engine Condition: Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115 and 40 CFR 60 Subpart IIII]

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

This section lists deadline dates for importing or installing stationary CI engines produced in the previous model year. None of the deadline dates affect the engines subject to Subpart IIII at this facility. Therefore, this section does not apply.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

This section applies to emergency stationary CI engines and stationary CI engines equipped with a diesel particulate filter. The engines subject to Subpart IIII at this facility do not fall under these two categories. Therefore, this section does not apply.

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

This section applies only to engine manufacturers. Therefore, this section will not be discussed unless it is referenced later by another section of this subpart.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

Section 60.4211(a) states that owners or operators who comply with the emission standards specified in this subpart must operate and maintain the stationary CI engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The following condition is on the proposed facility-wide permit and ensures continued compliance with this section:

- Emergency Standby IC Engine Condition: This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII]

Section 60.4211(b) applies to pre-2007 model year engines. Therefore, this section does not apply.

Section 60.4211(c) states that if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section. The engines subject to Subpart IIII at this facility are Tier certified engines that comply with the emission standards in Section 60.4204(b). Therefore, this section is satisfied.

Section 60.4211(d) applies to owners or operators who must comply with the emission standards specified in Section 60.4204(c) or Section 60.4205(d). The engines subject to Subpart IIII at this facility are not subject to the emission standards specified in Sections 60.4204(c) or 60.4205(d). Therefore, this section does not apply.

Section 60.4211(e) applies to owners or operators of modified or reconstructed stationary CI internal combustion engines. Therefore, this section does not apply.

Section 60.4211(f) states that if you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local

- standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

As indicated above, Section 60.4211(f)(2) allows for a maximum of 100 hours per calendar year for any combination of the purposes specified in paragraphs (f)(2)(1) through (iii) of this section. Now paragraph (f)(2)(i) alone allows a maximum of 100 hours per calendar year for maintenance and testing purposes provided if such operation is allowed by federal, state, or local government, whereas paragraphs (f)(2)(ii) and (iii) are not applicable. As discussed in this evaluation, since District

Rule 4702 and State ATCM allow a maximum operation of up to 100 hours for maintenance and testing, the engine will be allowed to operate for up to 100 hours per calendar year for maintenance and testing purposes pursuant to paragraph (f)(2)(i). Therefore, the following condition will be placed permit units S-1128-957-2, '-978-2, '-979-1, and '-980-1 to ensure compliance with this section:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III]

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

This section applies to owners or operators of a stationary CI engine with a displacement of less than 30 liters per cylinder and required to conduct performance tests pursuant to Section 60.4211(b). Section 60.4211(b) does not apply to these engines subject to Subpart III. Therefore, performance tests are not required and this section does not apply.

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

This section applies to owners or operators of CI engines with a displacement of greater than or equal to 30 liters per cylinder. Per the CARB/EPA emissions data sheet for the engines, the displacement for the engines are less than 30 liters per cylinder. Therefore, this section does not apply.

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

Section 60.4214(a) states owners and operators of non-emergency stationary CI engines that are greater than 3,000 hp, or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 175 hp and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section. The engines subject to Subpart III at this facility are post-2007 model year emergency engine rated less than 3,000 hp and has a displacement less than 10 liters per cylinder. Therefore, this section does not apply.

Section 60.4214(b) states that if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the

operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. Since the engines subject to Subpart IIII at this facility meet the applicable standards, this section does not apply.

Section 60.4214(c) applies to stationary CI engines equipped with a diesel particulate filter. Therefore, this section does not apply.

§ 60.4215 - § 60.4216 Special Requirements

These sections apply to engines operated outside the continental United States. Therefore, these sections do not apply.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Section 60.4217 applies to engines that do not use diesel fuel. Therefore, this section does not apply.

K. 40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

The requirements of 40 CFR 60 Subpart OOOO (*Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution*) establishes emission standards and compliance schedules for the control of VOC and sulfur dioxide (SO₂) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011, and on or before September 18, 2015.

Subpart OOOO could potentially apply to this facility's tanks. However, pursuant to section §60.5365(e), this subpart does not apply since the emissions from each of the tanks are estimated to be less than 6 tons per year. Chevron has one tank permit unit, S-1128-1024, with emissions that exceed 6 tons per year. However, this permit unit has not commenced construction, modification or reconstruction after August 23, 2011, and on or before September 18, 2015. Therefore, the requirements of this subpart are not applicable to this facility.

H. 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

In accordance with Section 63.6590(c) the engines permitted as S-1128-957-2, '-978-2, '-979-1, and '-980-1 meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. No further requirements apply for those permits units. The remaining engines at this facility, permitted as S-1128-305-5, '-306-6, '-307-5, '-949-4, and '-951-4 will comply with Subpart ZZZZ based on the following analysis.

§6585(b) states, "A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site."

§6585(c) states, "An area source of HAP emissions is a source that is not a major source."

The facility is not a major source as defined in §6585(b). Therefore, this facility is an area source of HAP emissions.

§6590(a) states, "An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand."

§6590(a)(1) defines the criteria for an existing stationary RICE as follows:

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

This facility is an area source of HAP emissions. The engines at this facility have not commenced construction or reconstruction on or after June 12, 2006. Therefore, the engines at this facility meet the definition of an existing stationary RICE as defined in §6590(a)(1)(iii).

§6590(b)(3) states that the following engines do not have to meet the requirements of this subpart and of subpart A of this part:

- Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP Emissions;
- Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii);
- Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

The engines at this facility are existing diesel-fired emergency stationary RICE located at non-major source of HAP emissions. Therefore, the engines (S-1128-305-5, '-306-6, '-307-5, '-949-4, '-951-4, '-955-2, '-956-1, '-957-2, '-978-2, '-979-1, and '-980-1) are subject to the requirements of this subpart; the following management practice requirements will be placed on the facility-wide permit as a mechanism to demonstrate compliance:

- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
- The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ]
- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
- The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
- The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]
- Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]
- The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air

pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

- The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ]
- {modified 3873} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2520 and 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

Engines S-1128-305-5, '-306-6, and '-307-5 have the following testing and maintenance operating limit to demonstrate compliance:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

Engines S-1128-949-4, '-951-4, '-955-2, '-956-1, '-957-2, '-978-2, '-979-1, and '-980-1 have the following testing and maintenance operating limit to demonstrate compliance:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

I. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) The unit must have an emission limit for the pollutant;
- 2) The unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

§64.2 – Applicability

This section requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) The unit must have an emission limit for the pollutant;
- 2) The unit must have add-on controls for the pollutant; such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

Pollutant	Major Source Threshold (lb/year)
VOC	20,000
NO _x	20,000
CO	200,000
PM ₁₀	140,000
SO _x	140,000

Tanks:

Tanks Bundle A:

S-1128-409-8, ‘-416-5, ‘-428-5, ‘-438-5, ‘-698-5, ‘-699-5, ‘-700-5, ‘-702-5, ‘-706-5, ‘-708-5, ‘-709-5, ‘-713-5 , and ‘-717-5.

- 1) These units do not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, these units are not subject to CAM.

Tanks Bundle B:

S-1128-250-10, ‘-262-12, ‘-263-12, ‘-400-11, ‘-401-11, ‘-402-13, ‘-404-10, ‘-405-10, ‘-406-10, ‘-407-10, ‘-411-9, ‘-412-9, ‘-935-12, ‘-936-12, and ‘-938-9.

- 1) These units only contain a VOC emission limit.
- 2) The vapor control systems on these units are considered inherent process equipment and not control devices. Therefore, these units are not subject to CAM.

Tanks Bundle C:

S-1128-229-12, '-701-14, '-703-13, and '-923-11.

- 1) These units only contain a VOC emission limit.
- 2) The vapor control systems on these units are considered inherent process equipment and not control devices. Therefore, these units are not subject to CAM.

S-1128-248-45: 6,600 BBL FIXED ROOF CRUDE OIL TANK T-24 WITH VAPOR CONTROL SYSTEM SHARED W/23 PERMIT UNITS; INCLUDING HEAT EXCHANGER(S), G/L SEPARATOR(S), GAS COMPRESSORS, & GAS PIPING TO SCRUBBED STEAM GENERATORS OR DOGGR APPROVED DISPOSAL WELL(S)

- 1) This unit only contains a VOC emission limit.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-704-5: 124,740 GALLON FIXED ROOF STORAGE TANK

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-974-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-975-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-976-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-977-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-981-4: TEOR OPERATION WITH UP TO 100 WELLS, INCLUDING OPEN OR CLOSED CASING VENTS, WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, WITH THE VAPORS PIPED TO THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617 AND/OR FLARE S-1128-1004

- 1) This unit contains emission limits for fugitive VOC emissions.
- 2) This unit is served by a VOC collection and control system or a flare to control VOC emissions. However, there are no add-on controls for the fugitive VOC emissions or the other criteria pollutants. Therefore, this unit is not subject to CAM.

S-1128-986-1: 10,500 GALLON (250 BBL) OPEN TOP PETROLEUM STORAGE TANK

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-989-5: 26 C OIL CLEANING PLANT VAPOR CONTROL SERVING TANKS S-1128-222, '-224, '-225, '-226, '-227, '-228, '-229, '-701, '-703, '-923, AND '-1015 INCLUDING 561,000 BTU/HR HEAT EXCHANGER, KNOCKOUT VESSEL, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1128-36, '-48, S-1141-553, '-554, AND '-555, FLARE S-1141-513, AND APPROVED INJECTION WELL(S)

- 1) This unit contains emission limits for VOC.
- 2) This unit is a vapor control system that serves other units at this facility. The emissions have already been accounted for at the permit units being served by this vapor control system, therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-991-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

- 1) This unit contains emission limits for VOC.
- 2) This tank is not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-992-4: UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

- 1) This unit contains emission limits for VOC.
- 2) This tank is not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-993-3: 2,076 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (26C FWKO)

- 1) This unit contains emission limits for VOC.
- 2) This engine is not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-994-5: 1,600 BBL FREE WATER KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) The vapor control systems on these units are considered inherent process equipment and not control devices. Therefore, these units are not subject to CAM.

S-1128-995-5: 1,600 BBL FREE WATER KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) The vapor control systems on these units are considered inherent process equipment and not control devices. Therefore, these units are not subject to CAM.

S-1128-997-3: 469 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (31E FWKO)

- 1) This unit contains emission limits for VOC.
- 2) This tank is not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-1014-3: 10,000 BBL CRUDE OIL STORAGE TANK (T-33) CONNECTED TO TANK ' -1019 VAPOR CONTROL SYSTEM (31X OCP)

- 1) These units do not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, these units are not subject to CAM.

S-1128-1018-3: 2000 BBL DRAIN TANK WITH NATURAL GAS BLANKETING (2F OCP)

- 1) This unit contains emission limits for VOC.
- 2) This engine is not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-1020-2: 10,000 BBL FIXED-ROOF WASH TANK (T-27) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019

- 1) This unit only contains a VOC emission limit.
- 2) The vapor control system on this unit is considered an inherent process equipment and not a control devices. Therefore, this unit is not subject to CAM.

S-1128-1024-2: 10,000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM5 STA. L

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-1128-1026-2: 906 BBL GAS/LIQUID SEPARATOR VESSEL V-200 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) The vapor control system on this unit is considered an inherent process equipment and not a control devices. Therefore, this unit is not subject to CAM.

IC Engines:

S-1128-305-5: 375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

- 1) This unit only contains a SO_x emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight.
- 2) This engine is not equipped with any external control devices for SO_x emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-306-6: 600 BHP CUMMINS MODEL KTA1965T DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

- 1) This unit only contains a SO_x emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight.
- 2) This engine is not equipped with any external control devices for SO_x emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-307-5: 375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

- 1) This unit only contains a SO_x emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight.
- 2) This engine is not equipped with any external control devices for SO_x emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

S-1128-949-4: 470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit does not have any add-on controls for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, this unit is not subject to CAM.

S-1128-951-4: 470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit does not have any add-on controls for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, this unit is not subject to CAM.

S-1128-978-2: 250 HORSEPOWER CUMMINS MODEL QSB7-G3 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (31X CONTROL ROOM, CYMRIC OILFIELD)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit does not have any add-on controls for NO_x, SO_x, and CO, however, it is equipped with a Positive Crankcase Ventilation (PCV) system which controls VOC and PM₁₀ emissions.
- 3) The PCV system is expected to reduce VOC and PM₁₀ emissions by at least 90%.

Pre-control Annual PE:

VOC

$$\begin{aligned} \text{PE} &= \text{VOC PE (lb/year)} \div (1 - 0.90) \\ &= (4 \text{ lb-VOC/year}) \div (1 - 0.90) \\ &= 40 \text{ lb-VOC/year} \end{aligned}$$

PM₁₀

$$\begin{aligned} \text{PE} &= \text{PM}_{10} \text{ PE (lb/year)} \div (1 - 0.90) \\ &= (2 \text{ lb- PM}_{10}\text{/year}) \div (1 - 0.90) \\ &= 20 \text{ lb- PM}_{10}\text{/year} \end{aligned}$$

Since 40 lb-VOC/yr < 20,000 lb-VOC/yr (Major Source threshold for VOC), this unit is not subject to CAM for VOC emissions. Since 20 lb-PM₁₀/yr < 140,000 lb-PM₁₀/yr (Major Source threshold for PM₁₀), this unit is not subject to CAM for PM₁₀ emissions.

Turbines:

Cogeneration Units:

S-1128-366-20, '-367-19, '-368-19, '-369-19, '-370-22, '-371-22, '-372-21, '-373-21, '-374-15, '-375-15, '-376-14, '-377-14, '-1028-2, and '-1029-2

- 1) These units contain emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) These units are served by a selective catalytic reduction (SCR) system to control NO_x emissions. However, each of the units are also equipped with a Continuous Emissions Monitoring (CEM) system for NO_x and therefore are exempt from CAM requirements.

Wells:

S-1128-116-67: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-36W #1 SERVING 146 STEAM ENHANCED WELLS INCLUDING SIX AUTOMATIC WELL TEST STATIONS AND GAS PIPING TO SCRUBBED STEAM GENERATORS, SEPARATOR VESSEL FV-3A, DOGGR APPROVED DISPOSAL WELL(S), AND 460 MMBTU/HR JOHN ZINK MODEL #EEF-LHLS-24 AIR ASSISTED EMERGENCY FLARE

- 1) This unit contains fugitive emission limits for NO_x, SO_x, PM₁₀, CO and VOC.
- 2) The vapor control system on this unit is a collection system and not a control device. Also, the unit is not equipped with a control device for any of the criteria pollutants. Therefore, this unit is not subject to CAM.

S-1128-118-24: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 628 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

- 1) This unit contains fugitive emission limits for SO_x and VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-125-24: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 253 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND VAPOR PIPING TO STEAM GENERATORS S-1128-15, S-1128-18, AND VAPOR PIPING TIED INTO VAPOR RECOVERY LINE FROM SYSTEM LISTED UNDER PERMIT S-1128-617

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-128-22: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-31X SERVING 60 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S), VAPOR COMPRESSOR(S), AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S)

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-130-21: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WVVC SYSTEM CC-36W #2 SERVING 146 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S, DOGGR APPROVED DISPOSAL WELL(S), OR 5 AUTOMATIC WELL TEST VESSELS - CYMRIC

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-144-16: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-5Z/6Z SERVING 33 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S) - CYMRIC

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-160-7: THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 16 STEAM DRIVE WELLS AND 18 CYCLIC WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

- 1) This unit does not contain emission limits for any of the criteria pollutants; therefore this unit is not subject to CAM.

S-1128-161-10: THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 65 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-162-7: THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 40 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

- 1) This unit does not contain emission limits for any of the criteria pollutants; therefore this unit is not subject to CAM.

S-1128-385-63: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-1Y SERVING 770 STEAM ENHANCED WELLS INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, GAS FLOW AND TEMPERATURE INDICATORS, AUTOMATIC WELL TEST STATIONS, AND GAS PIPING TO SCRUBBED STEAM GENERATORS, OR DOGGR APPROVED DISPOSAL WELL(S)

- 1) This unit contains a fugitive emission limit for VOC.
- 2) The vapor control system on this unit is considered inherent process equipment and not a control device. Therefore, this unit is not subject to CAM.

S-1128-390-10: 797 CYCLIC WELLS WITH CLOSED CASING VENTS

- 1) This unit does not contain emission limits for any of the criteria pollutants; therefore this unit is not subject to CAM.

S-1128-839-7: 20 UNCONTROLLED CYCLIC WELLS

- 1) This unit does not contain emission limits for any of the criteria pollutants; therefore this unit is not subject to CAM.

S-1128-921-8: 158 STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

- 1) This unit does not contain emission limits for any of the criteria pollutants; therefore this unit is not subject to CAM.

S-1128-1025-2: 1110 BBL GAS/LIQUID SEPARATOR VESSEL V-100 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

- 1) This permit unit is not subject to CAM since the vapor control system is a collection system rather than a control device.

Steam Generators:

S-1128-4-33: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #50 DIS# 43009-74 WITH FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-5-36: 69 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #51
DIS# 41752-08 WITH NORTH AMERICAN GLE LOW-NOX BURNER,
FGR, BLOWER MOTOR AND VARIABLE SPEED DRIVE
(APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-15-39: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED
STEAM GENERATOR #50-1-2F (DIS# 43002-81) WITH SO₂
SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-
LOW NOX BURNER

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The scrubber can reduce SO_x emissions by at least 95% by weight.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.050 \text{ lb-SO}_x\text{/MMBtu}) \div (1 - 0.95) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 547,500 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 547,500 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-16-29: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-2 DIS # 43003-81 WITH FGR

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-18-36: 62.5 MMBTU/HR NATURAL/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-4-2F WITH SO₂ SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NO_x BURNER - TAFT (GROUP II)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The scrubber can reduce SO_x emissions by at least 95% by weight.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.050 \text{ lb-SO}_x\text{/MMBtu}) \div (1 - 0.95) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 547,500 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 547,500 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for NO_x), this unit is subject to CAM for SO_x emissions. Conditions 8, 10, 18, 19, and 20 ensure continued compliance.

- Scrubber liquor pH shall be maintained above 6, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-19-30: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#50-5 DIS #43006-81) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.

- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-21-41: 69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 90, DIS# 43010-80) WITH NORTH AMERICAN GLE LOW-NO_x BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0128 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (69.0 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,089 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,089 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-25-45: 69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 62, DIS# 41764-06) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NO_x BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0128 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (69.0 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,089 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,089 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-27-31: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #53
DIS# 43010-78 WITH NORTH AMERICAN 4231 G-LE MAGNA
FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS
SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-28-32: 69.0 MMBTU/HR NATURAL/TEOR GAS-FIRED STEAM
GENERATOR #52 DIS# 43014-78 WITH NORTH AMERICAN
MAGNA-FLAME GLE LOW-NOX BURNER AND FGR (APPROVED
FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0128 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (69.0 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,089 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,089 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-29-43: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 55, DIS# 41752-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, SHARED SO₂ SCRUBBER WITH S-1128-30, -31, -32, -33, AND -34 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= \text{PE} \div (1 - \text{CE}) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-30-43: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 56, DIS # 41753-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= \text{PE} \div (1 - \text{CE}) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-31-41: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 57, DIS# 41763-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned}\text{Pre-control PE} &= \text{PE} \div (1 - \text{CE}) \\ &= (177,390 \text{ lb-SO}_x/\text{year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x/\text{year}\end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-32-43: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 58, DIS# 41751-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned}\text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x/\text{MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x/\text{year}\end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= PE \div (1 - CE) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-33-48: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 59, DIS# 41758-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= PE \div (1 - CE) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-34-46: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 60, DIS# 41759-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= PE \div (1 - CE) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-35-37: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 89) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-36-28: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND WITH SO₂ SCRUBBER AND FLUE GAS RECIRCULATION (CUSA ID #50-3-26C)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= PE \div (1 - CE) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 2520, 9.4.1 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 2520, 9.4.1 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-38-33: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (#94)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-48-32: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-4-26C) EQUIPPED WITH A NORTH AMERICAN MAGNAFLAME GLE ULTRA-LOW NOX BURNER WITH SO₂ SCRUBBER AND FLUE GAS RECIRCULATION

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions and a SO₂ scrubber to control SO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions. The SO₂ scrubber will be assumed to have 95% control efficiency.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

SO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.324 \text{ lb-SO}_x\text{/MMBtu}) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 177,390 \text{ lb-SO}_x\text{/year} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE} &= PE \div (1 - CE) \\ &= (177,390 \text{ lb-SO}_x\text{/year}) \div (1 - 0.95) \\ &= 3,547,800 \text{ lb-SO}_x\text{/year} \end{aligned}$$

Since 3,547,800 lb-SO_x/yr > 140,000 lb-SO_x/yr (Major Source threshold for SO_x), this unit is subject to CAM for SO_x emissions. The following conditions are on the current PTO, however, a reference to 40 CFR Part 64 will be added to ensure compliance:

- Scrubber liquor pH shall be maintained above 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64]
- Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64]
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64]
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64]
- If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64]

S-1128-57-22: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 LOW NOX BURNER AND FGR (#50-6 DIS #43012-81)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-58-24: 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-7 DIS# 43013-81 WITH FGR AND NORTH AMERICAN GLE ULTRA-LOW NOX BURNER

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-66-29: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 82, DIS# 26753-80) WITH FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE FOR BLOWER MOTOR, AND O₂ ANALYZER FOR FGR CONTROL

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \end{aligned}$$

= 15,398 lb-NO_x/year

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-68-21: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 76, DIS# 43016-82) NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE, AND O2 CONTROLLER - CYMRIC

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-75-24: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 91, DIS# 43001-85) WITH NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-76-25: 69 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 93, DIS# 41751-09) WITH A NORTH AMERICAN GLE MAGNA-FLAME LOW-NOX BURNER, FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE, AND O2 ANALYZER (PERMITTED FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0128 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (69 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,089 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,089 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-77-23: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 92, DIS# 43003-85) WITH A NORTH AMERICAN MODEL MAGNA FLAME GLE-4231 LOW NOX BURNER AND A WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-79-19: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #95 (DIS#43007-85) EQUIPPED WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-80-21: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 96) WITH FGR - VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-111-21: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 72) WITH A NORTH AMERICAN MODEL #4231 G-LE MAGNA FLAME LOW-NOX BURNER WITH VARIABLE FREQUENCY DRIVE FOR THE BLOWER MOTOR, FGR, AN O2 ANALYZER FOR FGR CONTROL, AND APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-112-24: 69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FLUE GAS RECIRCULATION (CUSA ID# 73) APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0128 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (69.0 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,089 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,089 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-113-22: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 97) WITH A NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR - VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-154-30: 62.5 MMBTU/HR NATURAL/PRODUCED GAS FIRED STEAM GENERATOR (CUSA ID #14) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-159-22: 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (CUSA ID# 18-A)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-941-9: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER WITH FGR

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.018 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (62.5 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 15,398 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 15,398 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-952-8: 30.0 MMBTU/HR NATURAL GAS, PROPANE, OR BUTANE-FIRED STRUTHERS STEAM GENERATOR S/N 75/76-37153-2 WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (ALSO PERMITTED AS S-2010-200 IN LOW SS)

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit does not have any add-on controls for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, this unit is not subject to CAM.

S-1128-959-1: 85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.008 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (89 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 9,308 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 9,308 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-960-1: 85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.008 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (89 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 9,308 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 9,308 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-961-1: 85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.008 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (89 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 9,308 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 9,308 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-1128-1023-2: 25.2 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #60; DIS# 20754-66) WITH O₂ ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FGR - DERBY ACRES LEASE

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions. There are no add-on controls for the other criteria pollutants.
- 3) The steam generator is equipped with a low NO_x burner, which is an integral control, and employs FGR as ad-on control. Based on emission factors from AP-42, Table 1.4-1, July 1998, the FGR will provide 36% control of NO_x emissions.

Pre-control Annual PE:

NO_x

$$\begin{aligned} PE &= EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \text{ hr/year} \\ &= (0.0365 \text{ lb-NO}_x\text{/MMBtu}) \div (1 - 0.36) \times (25.2 \text{ MMBtu/hr}) \times (8,760 \text{ hr/year}) \\ &= 12,590 \text{ lb-NO}_x\text{/year} \end{aligned}$$

Since 12,590 lb-NO_x/yr < 20,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

Flares:

S-1128-116-67: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-36W #1 SERVING 146 STEAM ENHANCED WELLS INCLUDING SIX AUTOMATIC WELL TEST STATIONS AND GAS PIPING TO SCRUBBED STEAM GENERATORS, SEPARATOR VESSEL FV-3A, DOGGR APPROVED DISPOSAL WELL(S), AND 460 MMBTU/HR JOHN ZINK MODEL #EEF-LHLS-24 AIR ASSISTED EMERGENCY FLARE

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) The flare in this unit does not have any add-on controls for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, this unit is not subject to CAM.

S-1128-934-13: 4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS

- 3) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 4) This unit does not have any add-on controls for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, this unit is not subject to CAM.

S-1128-1004-4: 25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-2010-317) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S HEAVY OIL WESTERN STATIONARY SOURCE

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This flare is not equipped with any external control devices for NO_x, SO_x, PM₁₀, CO, and VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

J. 40 CFR 82 Subpart B – Servicing of Motor Vehicle Air Conditioners

The purpose of 40 CFR Part 82 Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Clean Air Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances.

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

The amendments to this subpart did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Permit Unit	Condition #
S-1128-0-3	29

J. 40 CFR 82 Subpart F – Recycling and Emissions Reductions

The purpose of 40 CFR Part 82 Subpart F is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

These regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

The amendments to this subpart did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Permit Unit	Condition #
S-1128-0-3	28

IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

Chevron USA Inc. is not requesting any new permit shields within this Title V renewal project. In addition, Chevron USA Inc. is not requesting any changes to the existing permit shields already included in their Title V operating permit. Therefore, all of the existing permit shields will be maintained on the revised permit for this renewal project.

C. Obsolete Permit Shields From Existing Permit Requirements

There are no obsolete permit shield conditions to be removed from the permits.

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-1128-0-3

EXPIRATION DATE: 02/29/2016

FACILITY-WIDE REQUIREMENTS

1. Heavy Oil Western Stationary Source Facility-Wide.
2. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
4. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
5. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
6. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
7. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
8. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
9. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: CHEVRON USA INC

Location: HEAVY OIL WESTERN STATIONARY SOURCE, KERN COUNTY

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10. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
12. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
13. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
14. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
15. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
16. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
17. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
18. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
19. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
20. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
21. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
22. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

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23. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05), by using EPA Method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
24. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
25. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
26. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
27. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
28. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
29. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
30. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
31. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
32. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
33. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
34. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

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35. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
36. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
37. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
38. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
39. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
40. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
42. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
44. All permits for facilities S-1128, S-1129, S-1141, S-1549, and S-2592 are included in the Chevron USA Inc. Heavy Oil Western stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
45. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68] Federally Enforceable Through Title V Permit

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46. The reporting periods of the Report of Required monitoring and Compliance Certification Report begin November 30 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due on the 30 days after the end of the reporting period. If the due date falls on a day that the SJVAPCD is closed, they will be due on the next business day. [District Rule 2520] Federally Enforceable Through Title V Permit
47. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
48. The following conditions which include category titles are only applicable to those permit units with conditions which reference the specific category title. [District Rule 2080] Federally Enforceable Through Title V Permit
49. Steam Generator Dormant Emissions Unit Condition: While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
50. Steam Generator Dormant Emissions Unit Condition: While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
51. Steam Generator Dormant Emissions Unit Condition: Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
52. Steam Generator Dormant Emissions Unit Condition: Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
53. Steam Generator Dormant Emissions Unit Condition: Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
54. Steam Generator General Condition: Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rule 4301] Federally Enforceable Through Title V Permit
55. Steam Generator General Condition: Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
56. Steam Generator General Condition: Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520 and 4301] Federally Enforceable Through Title V Permit
57. Steam Generator General Condition: Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4306 and 4320] Federally Enforceable Through Title V Permit
58. Steam Generator General Condition: Duration of start-up or shutdown shall not exceed two hours each per occurrence. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
59. Steam Generator General Condition: Permittee shall maintain records of duration of each start-up and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
60. Steam Generator General Condition: Annual tests results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx or CO limits of this permit, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx or CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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61. Steam Generator General Condition: The following conditions must be met for representative unit(s) to be used to test for NOx or CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 4305, and 4320] Federally Enforceable Through Title V Permit
62. Steam Generator General Condition: All units in a group for which representative units are source for NOx or CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
63. Steam Generator General Condition: All units in a group for which representative units are source tested for NOx or CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
64. Steam Generator General Condition: The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
65. Steam Generator General Condition: Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
66. Steam Generator General Condition: Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit
67. Steam Generator General Condition: The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
68. Steam Generator General Condition: Flue gas recirculation shall be utilized, as needed, in conjunction with low NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
69. Steam Generator General Condition: If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit
70. Steam Generator General Condition: If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the fuel gas being fired in the steam generator shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, double GC for H2S and mercaptans, or grab sample analysis by double GC performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
71. Steam Generator General Condition: If the steam generator is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 4306, and 4320] Federally Enforceable Through Title V Permit

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72. Steam Generator General Condition: Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
73. Steam Generator General Condition: Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
74. Steam Generator General Condition: The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
75. Steam Generator General Condition: The requirements of SJVUAPCD Rule 4351 (Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
76. Steam Generator General Condition: All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
77. Steam Generator Fuel Monitoring Condition: A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [40 CFR 60.48(c)(g)] Federally Enforceable Through Title V Permit
78. Steam Generator Fuel Monitoring Condition: When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
79. Steam Generator Fuel Monitoring Condition: When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using test methods specified in "Steam Generator - Source Testing Conditions". Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
80. Steam Generator Fuel Monitoring Condition: If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using "Steam Generator - Source Testing Conditions". [District Rule 2520] Federally Enforceable Through Title V Permit
81. Steam Generator Fuel Monitoring Condition: If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by methods specified in "Steam Generator - Source Testing Conditions". [District Rules 2520, 4305, and 4320] Federally Enforceable Through Title V Permit
82. Steam Generator Fuel Monitoring Condition: Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
83. Steam Generator Fuel Monitoring Condition: Compliance with SO_x emission limits shall be demonstrated by fuel gas sulfur contents analysis at the time of NO_x testing, except for units fired on natural gas purchased from a PUC regulated utility or operated with flue gas scrubber. [District Rule 1081] Federally Enforceable Through Title V Permit

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84. Steam Generator Source Testing Condition: All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
85. Steam Generator Source Testing Condition: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
86. Steam Generator Source Testing Condition: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
87. Steam Generator Source Testing Condition: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
88. Steam Generator Source Testing Condition: The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
89. Steam Generator Source Testing Condition: Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
90. Steam Generator Source Testing Condition: Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
91. Steam Generator Source Testing Condition: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
92. Steam Generator Source Testing Condition: Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods or as approved by APCO. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
93. Steam Generator Source Testing Condition: The following test methods shall be used (or other methods as approved by the District): NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; SO_x (lb/MMBtu) - EPA Method 6, 6C, 8 or ARB Method 100; Stack Gas Oxygen - EPA Method 3 or 3A or ARB Method 100; Stack Gas Velocity (ft/min) - EPA Method 2; Stack Gas Volume Flow (cfm) - EPA Method 19; Stack Gas Moisture Content (%) - EPA Method 4; Fuel Gas Sulfur Content - EPA Method 11 or EPA Method 15 or ASTM D6288, D1072, D3031, D4084, D3246, or grab sample analysis by double GC; Fuel Gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588; PM₁₀ (lb/scf) - EPA Methods 5 (front half), 201A, and/or 202, CARB Method 5, or any combination of these PM₁₀ methods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
94. Steam Generator Periodic Monitoring Condition: The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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95. Steam Generator Periodic Monitoring Condition: If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
96. Steam Generator Periodic Monitoring Condition: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
97. Steam Generator Periodic Monitoring Condition: The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
98. Heavy Oil Tank Inspection and Maintenance: Flanges shall be monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
99. Heavy Oil Tank Inspection and Maintenance: All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
100. Heavy Oil Tank Inspection and Maintenance: In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any venting of such devices found by visual, audible, or olfactory detection method. [District Rule 2201] Federally Enforceable Through Title V Permit
101. Heavy Oil Tank Inspection and Maintenance: Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
102. Heavy Oil Tank Inspection and Maintenance: Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit
103. Heavy Oil Tank Inspection and Maintenance: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520] Federally Enforceable Through Title V Permit

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104. Heavy Oil Tank Inspection and Maintenance: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520] Federally Enforceable Through Title V Permit
105. Heavy Oil Tank Inspection and Maintenance: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520] Federally Enforceable Through Title V Permit
106. Heavy Oil Tank Inspection and Maintenance: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
107. Heavy Oil Tank Inspection and Maintenance: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 18 or 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 18 or 25 at least annually. [District Rule 2520] Federally Enforceable Through Title V Permit
108. Heavy Oil Tank Inspection and Maintenance: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520] Federally Enforceable Through Title V Permit
109. Heavy Oil Tank Inspection and Maintenance: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520] Federally Enforceable Through Title V Permit
110. Heavy Oil Tank Inspection and Maintenance: A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
111. Heavy Oil Tank Cleaning Condition: Operator shall notify the District in writing at least 72 hours prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information: (1) The PTO number and physical location of the tank being degassed, (2) The date and time that tank degassing and cleaning activities will begin, (3) The degassing method, as allowed in this permit, to be used, and (4) The method to be used to clean the tank, including any solvents to be used. [District Rule 2080] Federally Enforceable Through Title V Permit
112. Heavy Oil Tank Cleaning Condition: To facilitate connection to an external APCO-approved vapor recovery system a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
113. Heavy Oil Tank Cleaning Condition: During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit
114. Heavy Oil Tank Cleaning Condition: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

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115. Heavy Oil Tank Cleaning Condition: When storing organic liquid of TVP less than 0.5 psia, prior to returning the tank to normal operation, the tank vapor control system shall either be reactivated and the pressure/relief valves closed, or the tank shall be filled to the maximum possible level with water, inert gas, or a liquid with a TVP less than 0.5 psia and the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall then be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
116. Heavy Oil Tank Cleaning Condition: Prior to opening the tank to allow tank cleaning, one of the following degassing procedures must be followed: 1) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; 4) For free-water knockout tanks, the operator may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced; or 5) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained. [District Rule 2080] Federally Enforceable Through Title V Permit
117. Heavy Oil Tank Cleaning Condition: Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
118. Heavy Oil Tank Cleaning Condition: Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
119. Heavy Oil Tank Cleaning Condition: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
120. Heavy Oil Tank Cleaning Condition: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
121. Heavy Oil Tank Cleaning Condition: While performing tank cleaning activities, operators may use the following cleaning agents: clean (produced) water, diesel, solvents with an initial boiling point of greater than 302 °F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
122. Heavy Oil Tank Cleaning Condition: Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
123. Heavy Oil Tank Testing Condition: Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
124. Heavy Oil Tank Testing Condition: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit

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125. Heavy Oil Tank Testing Condition: Operator shall conduct quarterly sampling from the tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
126. Heavy Oil Tank Testing Condition: VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
127. Heavy Oil Tank Testing Condition: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM method D 287-92 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D-4057-95 "Standard Practices for manual Sampling of Petroleum and Petroleum Products". [District Rule 4623] Federally Enforceable Through Title V Permit
128. Heavy Oil Tank Testing Condition: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
129. Heavy Oil Tank Testing Condition: Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
130. Heavy Oil Tank Testing Condition: The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
131. Heavy Oil Tank Testing Condition: The permittee shall keep accurate records of vapor VOC concentration, API gravity, true vapor pressure, storage temperature and types of liquids stored. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
132. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain a current list of all thermally enhanced production wells associated with this operation and accurate records of fugitive inspection component counts of non-exempt components and leak inspection results, and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
133. Thermally Enhanced Oil Recovery Condition: Permittee shall not operate a steam-enhanced crude oil production well unless they comply with one of the following requirements: 1) Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere; or 2) Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
134. Thermally Enhanced Oil Recovery Condition: Fugitive VOC limit listed above does not include components handling produced fluids with an API gravity less than 30 degrees, or components in water/oil service (condensate) with a water content equal to or greater than 50% by weight, or components handling fluid streams with a VOC content of 10% or less by weight. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
135. Thermally Enhanced Oil Recovery Condition: The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 4407] Federally Enforceable Through Title V Permit

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136. Thermally Enhanced Oil Recovery Condition: Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
137. Thermally Enhanced Oil Recovery Condition: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, Section 5 (as amended December 14, 2006). [District Rule 4401] Federally Enforceable Through Title V Permit
138. Thermally Enhanced Oil Recovery Condition: The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401] Federally Enforceable Through Title V Permit
139. Thermally Enhanced Oil Recovery Condition: The operator shall maintain copies of training records and of the latest APCO-approved Operator Management Plan (OMP) at the facility and make such available to the APCO, ARB, and US EPA upon request. [District Rule 4401] Federally Enforceable Through Title V Permit
140. Thermally Enhanced Oil Recovery Condition: By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401] Federally Enforceable Through Title V Permit
141. Thermally Enhanced Oil Recovery Condition: In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
142. Thermally Enhanced Oil Recovery Condition: A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401] Federally Enforceable Through Title V Permit
143. Thermally Enhanced Oil Recovery Condition: A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401] Federally Enforceable Through Title V Permit
144. Thermally Enhanced Oil Recovery Condition: There shall be no components with major liquid leaks or with gas leaks greater than 50,000 ppmv. There shall not be more minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv than the following: 3 leaks for 1 - 25 wells, 6 leaks for 26 - 50 wells, 8 leaks for 51 - 100 wells, 10 leaks for 101 - 250 wells, 15 leaks for 251 - 500 wells, and 1 leak for each 20 wells (with a minimum of 50 wells test) for more than 500 wells connected to a VOC collection and control system. The operator shall be in violation of Rule 4401 if any District inspection, or operator inspection conducted as a requirement of this rule, demonstrates that one or more of the leak standard conditions set forth in section 5.6.2 exists. [District Rule 4401] Federally Enforceable Through Title V Permit
145. Thermally Enhanced Oil Recovery Condition: Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
146. Thermally Enhanced Oil Recovery Condition: Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

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147. Thermally Enhanced Oil Recovery Condition: Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit
148. Thermally Enhanced Oil Recovery Condition: In addition to the inspections required by Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
149. Thermally Enhanced Oil Recovery Condition: In addition to the inspections required by Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
150. Thermally Enhanced Oil Recovery Condition: Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
151. Thermally Enhanced Oil Recovery Condition: Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit
152. Thermally Enhanced Oil Recovery Condition: Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
153. Thermally Enhanced Oil Recovery Condition: Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit
154. Thermally Enhanced Oil Recovery Condition: Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401] Federally Enforceable Through Title V Permit
155. Thermally Enhanced Oil Recovery Condition: The operator shall repair minor gas leaks within 14 days, major gas leaks which less than or equal to 50,000 ppmv within 5 days., major gas leaks which are greater than 50,000 ppmv within two days, minor liquid leaks within 3 days, and major liquid leaks within 2 days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4401] Federally Enforceable Through Title V Permit

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156. Thermally Enhanced Oil Recovery Condition: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401] Federally Enforceable Through Title V Permit
157. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identity and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit
158. Thermally Enhanced Oil Recovery Condition: Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacture's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit
159. Thermally Enhanced Oil Recovery Condition: Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401] Federally Enforceable Through Title V Permit
160. Thermally Enhanced Oil Recovery Condition: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401] Federally Enforceable Through Title V Permit
161. Thermally Enhanced Oil Recovery Condition: VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401] Federally Enforceable Through Title V Permit

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162. Thermally Enhanced Oil Recovery Condition: The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit
163. Thermally Enhanced Oil Recovery Condition: The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. [District Rule 4401] Federally Enforceable Through Title V Permit
164. Thermally Enhanced Oil Recovery Condition: An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system. [District Rule 4401] Federally Enforceable Through Title V Permit
165. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401] Federally Enforceable Through Title V Permit
166. Thermally Enhanced Oil Recovery Condition: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401] Federally Enforceable Through Title V Permit
167. Emergency Standby IC Engine Condition: Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
168. Emergency Standby IC Engine Condition: This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
169. Emergency Standby IC Engine Condition: This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
170. Emergency Standby IC Engine Condition: Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
171. Emergency Standby IC Engine Condition: During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
172. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 2520 and 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
173. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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174. Emergency Standby IC Engine Condition: The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
175. Emergency Standby IC Engine Condition: The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
176. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
177. Emergency Standby IC Engine Condition: The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
178. Emergency Standby IC Engine Condition: The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
179. Emergency Standby IC Engine Condition: The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
180. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
181. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
182. Emergency Standby IC Engine Condition: All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2520 and 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-4-33

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #50 DIS# 43009-74 WITH FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 2.46 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,855 lb-NOx/yr, 34.5 lb-CO/day, and 12,593 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.007 lb-SOx/MMBtu, 0.0068 lb-PM10/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, NOx emissions from the steam generator shall not exceed 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 31 ppmvd @ 3% O2 or 0.023 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-5-36

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

69 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #51 DIS# 41752-08 WITH NORTH AMERICAN GLE LOW-NOX BURNER, FGR, BLOWER MOTOR AND VARIABLE SPEED DRIVE (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 0.0076 lb-PM10/MMBtu or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 31.8 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from the steam generator shall not exceed any of the following limits: 27.6 lb-NO_x/day, 7,737 lb-NO_x/yr, or 38.1 lb-CO/day and 13,902 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NO_x and CO. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-6-19

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-1-26C, DIS# 43011-74) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.037 lb/MMBtu, SOx (as SO2): 0.050 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-7-10

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

8.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS LOCOMOTIVE BOILER #1

PERMIT UNIT REQUIREMENTS

1. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3 and Kern County Rules 404 and 408] Federally Enforceable Through Title V Permit
3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
4. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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8. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the boiler, including start-up and shutdown, shall not exceed any of the following limits: 20.2 lb-NOx/day, 1080 lb-NOx/yr, 16.6 lb-CO/day, and 2472 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. During start-up and shutdown periods emissions from the boiler shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.0824 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: SOX (as SO2): 0.00285 lb/MMBtu; PM10: 0.0139 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, and 4801] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.036 lb/MMBtu or 30 ppmvd @ 3% O2, or CO: 0.0824 lb/MMBtu or 112 ppmvd @ 3% O2. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
14. Total heat input to this unit shall be less than 30 billion Btu per calendar year. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
15. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306] Federally Enforceable Through Title V Permit
16. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 43060] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305 and 4306] Federally Enforceable Through Title V Permit
25. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
26. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
27. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 43060] Federally Enforceable Through Title V Permit
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any non-certified fuel and record specific type of noncertified fuel used.. [District Rule 2520, 9.4.2 and 40 CFR 60.48(c)(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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31. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [District Rule 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306] Federally Enforceable Through Title V Permit
33. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
34. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 1081 (Amended December 16, 1993), 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-8-10

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

8.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS LOCOMOTIVE BOILER #2

PERMIT UNIT REQUIREMENTS

1. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
2. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
3. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

7. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3 and Kern County Rules 404 and 408] Federally Enforceable Through Title V Permit
9. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NO_x testing, except for natural gas purchased from a PUC regulated utility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the boiler, including start-up and shutdown, shall not exceed any of the following limits: 20.2 lb-NO_x/day, 1080 lb-NO_x/yr, 16.6 lb-CO/day, and 2472 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. During start-up and shutdown periods emissions from the boiler shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.0824 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: SO_x (as SO₂): 0.00285 lb/MMBtu; PM₁₀: 0.0139 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, and 4801] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NO_x (as NO₂): 0.036 lb/MMBtu or 30 ppmvd @ 3% O₂, or CO: 0.0824 lb/MMBtu or 112 ppmvd @ 3% O₂. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
14. Total heat input to this unit shall be less than 30 billion Btu per calendar year. [District Rule 2201 and 4306] Federally Enforceable Through Title V Permit
15. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306] Federally Enforceable Through Title V Permit
16. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305 and 4306] Federally Enforceable Through Title V Permit
25. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
26. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
27. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306] Federally Enforceable Through Title V Permit
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any non-certified fuel and record specific type of noncertified fuel used.. [District Rule 2520, 9.4.2 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

31. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [District Rules 2201 and 4306, and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306] Federally Enforceable Through Title V Permit
33. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
34. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 1081 (Amended December 16, 1993), 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-11-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-2-26C, DIS# 43015-78) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.037 lb/MMBtu, SOx (as SO2): 0.050 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-15-39

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-1-2F (DIS# 43002-81)
WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
12. Low pressure fuel induced recirculation system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10 - 0.050 lb/MMBtu, SOx (as SO2) - 0.324 lb/MMBtu, NOx (as NO2) - 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, VOC - 0.003 lb/MMBtu, or CO: 0.021 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Upon recommencing operation, source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
16. Upon recommencing operation, source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
17. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emissions when testing not less than once every 36 months, source testing for NOx and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
18. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401] Federally Enforceable Through Title V Permit
20. Permittee shall keep daily records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
22. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SOx is reduced by 95% or to 9 ppmvd SOx @ 3% O2 in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-16-29

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-2 DIS # 43003-81 WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Flue gas recirculation system shall be operational at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.006 lb-SO_x/MMBtu, 0.007 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. {584} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. {468} The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-17-31

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-3 DIS# 43004-81 WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Flue gas recirculation system shall be operational at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed PM10: 0.007 lb/MMBtu, SOx (as SO2): 0.006 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.011 lb/MMBtu, and CO: 0.022 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
8. Source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
9. If permittee fails any compliance demonstration for NOx and CO emissions when testing not less than once every 36 months, source testing for NOx and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. The stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-18-36

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-4-2F WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER - TAFT (GROUP II)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and TEOR gas volume flowmeter. [District Rules 2201, 4305,5.4, and 4306, 5.4] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. If installed, low pressure fuel induced recirculation system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber liquor pH shall be maintained above 6, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64] Federally Enforceable Through Title V Permit
11. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 2520, 9.3.2 and 4801] Federally Enforceable Through Title V Permit
13. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54 lb-NO_x/day, 9,855 lb-NO_x/yr, 55.5 lb-CO/day, and 20,258 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: SO_x (as SO₂): 0.324 lb/MMBtu; PM₁₀: 0.050 lb/MMBtu; or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.1 and 5.2, 4406 and 4801] Federally Enforceable Through Title V Permit
16. Emission rates, except during startup and shutdown, shall not exceed any of the following: NO_x (as NO₂): 0.018 lb/MMBtu or 15 ppmvd @ 3% O₂, or CO: 50 ppmvd @ 3% O₂. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SO_x is reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-19-30

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#50-5 DIS #43006-81) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.006 lb-SO_x/MMBtu, 0.007 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-38-33

EXPIRATION DATE: 02/29/2016

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (#94)

PERMIT UNIT REQUIREMENTS

1. The sulfur content of fuel combusted shall not exceed 5 grains-S per 100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. This equipment is approved to be operated at the following locations: Sec. 25, T31S/R22E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only PUC-quality natural gas or a combination of natural gas and vapor recovery gas shall be used as fuel. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The combined PM10 emission rate for steam generators S-1128-38 and -158 shall not exceed 21.0 lb/day whenever steam generator S-1128-38 is at any of the following locations: Sec. 26, T32S/R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall maintain records of fuel type, quantity, and results of monthly vapor recovery gas sulfur analyses, and such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of the dates, locations, and daily fuel consumption for steam generators S-1128-38 and -158, and such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
10. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the fuel gas being fired in the steam generator shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, double GC for H₂S and mercaptans, or grab sample analysis by double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the steam generator is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and 4306] Federally Enforceable Through Title V Permit
13. Emissions from the steam generator shall not exceed any of the following limits: 0.0143 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306] Federally Enforceable Through Title V Permit
18. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
23. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
25. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305 and 4306] Federally Enforceable Through Title V Permit
27. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
28. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
29. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306] Federally Enforceable Through Title V Permit
30. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306] Federally Enforceable Through Title V Permit
31. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

32. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx or CO emissions limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 2520, 9.3.2, 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
33. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2, 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
34. All units in a group for which representative units are source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2, 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
35. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2, 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
36. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 9.3.2, 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
37. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any non-certified fuel and record specific type of noncertified fuel used.. [District Rule 2520, 9.4.2 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
38. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306] Federally Enforceable Through Title V Permit
40. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
41. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
42. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
43. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

44. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
45. Permittee shall maintain daily records of volume of fuel gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District NSR Rule] Federally Enforceable Through Title V Permit
46. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. {468} The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
49. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in the conditions below. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
50. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions below, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
51. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR 52, 60 and 61 and all other applicable Federal, State and local regulations. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
52. Permittee shall have installed a hydrocarbon vapor recovery system, having a collection efficiency of 85% on the following: (143) steam drive producing wells designated in this PSD permit, plus (16) existing steam drive producing wells located in Section 16, T30S, R22E, M.D.B. & M. This system shall be installed on existing wells prior to project start-up, and on new or modified wells before venting steam to the atmosphere. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
53. At such times as specified by the USEPA, permittee shall conduct performance tests for HC and furnish the District and the USEPA a written report of the results of such tests. The tests for HC shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
54. Performance tests shall be conducted for each vapor recovery system listed above in the Cymric and Taft areas. The USEPA shall be notified at least 30 days in advance of such test to allow an observer to be present. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
55. Permittee shall not discharge or cause the discharge of VOC into the atmosphere in excess of 50.6 lbs/day for each well in the system. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

56. Permittee shall operate and maintain operable scrubbers on the equipment designated below: (1) 50 MMBtu/hr steam generator and (2) 22 MMBtu/hr steam generators to be located in Section 1, T11N, R24W; (5) 50 MMBtu/hr steam generators and (1) 22 MMBtu/hr steam generator to be located in Section 2, T11N, R24W; (1) 50 MMBtu/hr steam generator to be located in Section 31, T12N, R23W; (3) 50 MMBtu/hr steam generators and (1) 22 MMBtu/hr steam generator to be located in Section 25, T32S, R23E; and (1) 50 MMBtu/hr steam generator and (2) 22 MMBtu/hr steam generators to be located in Section 26, T32S, R23E. Exhaust gases from the above units shall be ducted through operating scrubbers. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
57. Permittee shall not discharge into the atmosphere SO₂ in excess of 0.145 lb/MMBtu (maximum 2-hour average) for the steam generators designated in the previous condition. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
58. Permittee shall operate, and maintain operable excess oxygen control equipment on the units designated below: (2) 22 MMBtu/hr steam generators to be located in Section 1, T11N, R24W; (5) 50 MMBtu/hr steam generators and (1) 22 MMBtu/hr steam generator to be located in Section 2, T11N, R24W; (1) 50 MMBtu/hr steam generator to be located in Section 31, T12N, R23W; (3) 50 MMBtu/hr steam generators and (1) 22 MMBtu/hr steam generator to be located in Section 25, T32S, R23E; and (1) 50 MMBtu/hr steam generator and (2) 22 MMBtu/hr steam generators to be located in Section 26, T32S, R23E. The concentration of excess oxygen in the exhaust gases shall not exceed 3% for the above units on a 24-hour average basis. The excess oxygen level shall be recorded continuously in a permanent record and shall be available for periodic inspection by the USEPA. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
59. Permittee shall not discharge into the atmosphere NO_x in excess of 0.50 lb/MMBtu (maximum 2-hour average) for the 50 MMBtu/hr steam generators and 0.57 lb/MMBtu (maximum 2-hour average) for the 22 MMBtu/hr steam generators designated in the previous condition. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
60. At such times as specified by the USEPA, permittee shall conduct performance tests for SO₂ and NO_x, and furnish the District and the USEPA a written report of the results of such tests. The tests for SO₂ and NO_x shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
61. The performance tests shall be conducted for the equipment designated below: for SO₂ the units designated in condition 44; for NO_x the units designated in condition 46. Performance tests for the emissions of SO₂ and NO_x shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources on the equipment named above. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for an observer to be present and to allow time for development of an approvable performance test plan. Such prior approval will minimize the possibility of USEPA rejection of test results for procedural deficiencies. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit
62. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; and c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [PSD SJ 77-31, 32, 33, 39] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-21-41

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 90, DIS# 43010-80) WITH NORTH AMERICAN GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 36 (SE), T32S, 23E; Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NO_x/day, 7,737 lb-NO_x/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-25-45

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 62, DIS# 41764-06) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Permittee shall maintain 0.5 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This generator is approved to operate at the following locations: Sec. 31, T29S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 29 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit
12. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NO_x testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-26-41

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 63, DIS# 43003-79) WITH FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. On or after June 1, 2007, this equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. Steam generator may be operated with North American perforated or solid "S" diffuser plates, four variations of North American solid "S" diffuser plate, or three types of North American Company prototype diffuser plates. After changing burner diffuser plate, stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured by a District approved portable analyzer. Changes in burner diffuser plates and subsequent emission measurements shall be recorded in a contemporaneous log. [District Rule 2520 section 6.4.2] Federally Enforceable Through Title V Permit
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

7. Upon recommencing operation, permittee shall maintain 0.5 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This generator is approved to operate at the following locations: Sec. 31, T29S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, emission rates shall not exceed PM10: 0.038 lb/MMBtu, SO_x (as SO₂): 0.324 lb/MMBtu, NO_x (as NO₂): 0.036 lb/MMBtu or 30 ppmv @ 3% O₂, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu or 29 ppmv @ 3% O₂. [District Rules 4305 and 2201] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers in any calendar month in which the unit operates. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
11. If the NO_x or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall notify the District and take corrective action as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
13. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
14. Upon recommencing operation, if permittee fails any compliance demonstration for NO_x and CO emissions when testing not less than once every 36 months, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
15. The following conditions must be met for representative units to be used to test for NO_x and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. When incinerating vapor recovery gas, testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Upon recommencing operation, the permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-27-31

EXPIRATION DATE: 02/29/2016

SECTION: 07 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #53 DIS# 43010-78 WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.3 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Approved locations for this equipment: Sec. 7, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; SE/4 of Sec. 35, T29S/21E; and SE/4 of Sec. 8, T30S/R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 2.46 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.007 lb-SOx/MMBtu, 0.0068 lb-PM10/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NOx emissions from the steam generator shall not exceed 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 31 ppmvd @ 3% O2 or 0.023 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,855 lb-NOx/yr, 34.5 lb-CO/day, and 12,593 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-28-32

EXPIRATION DATE: 02/29/2016

SECTION: 07 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL/TEOR GAS-FIRED STEAM GENERATOR #52 DIS# 43014-78 WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.3 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This generator is approved to operate at the following locations: Section 7, T30S, R22E; SW/4 of Section 36, T29S, R21E; NE/4, NW/4, SE/4, and SW/4 of Section 1, T30S, R21E; SE/4 of Section 35, T29S, R21E; SW/4 and SE/4 of Section 6, T30S, R22E; SW/4 of Section 31, T29S, R22E; SE/4 and SW/4 of Section 8, T30S, R22E; and all of Sections 19 and 20, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. {530} Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0068 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 21.2 lb-NO_x/day, 7,737 lb-NO_x/yr, 54.9 lb-CO/day, and 13,902 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-29-43

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 55, DIS# 41752-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, SHARED SO₂ SCRUBBER WITH S-1128-30, -31, -32, -33, AND -34 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lbs-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall maintain daily and annual records of all start-up and shutdown occurrences and durations. [District Rule 2201 and Rules 4305, 4306, and 2520, 9.4.2]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Operation shall include one gas/liquid knockout vessel. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 from the total number of vapor components associated with gas/liquid separator shall not exceed 1.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. VOC content of hydrocarbons in gas processed by gas/liquid separator shall not exceed 30%. [District Rule 2201] Federally Enforceable Through Title V Permit
12. VOC content of hydrocarbons in TEOR gas processed by gas/liquid separator shall be measured upon startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit
14. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
15. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
20. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
23. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
24. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
26. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, ` -30, ` -31, ` -32, ` -33, and ` -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
31. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
36. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
37. Records of VOC content of the hydrocarbons in the TEOR gas processed by gas/liquid separator shall be kept at the facility and made readily available for compliance inspection upon request for a period of 5 years. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-30-43

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 56, DIS # 41753-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
10. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
16. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9 [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
22. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, -128, -130, -144, -385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
27. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-31-41

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 57, DIS# 41763-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
15. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
19. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. Exhaust from this steam generator shall be directed to the SOx scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
21. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. Total SO2 emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
26. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-32-43

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 58, DIS# 41751-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9 [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, -128, -130, -144, -385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
27. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-33-48

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 59, DIS# 41758-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District 220, 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 4305, 4306, and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9 [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
25. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520] Federally Enforceable Through Title V Permit
26. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, -128, -130, -144, -385, tank battery vapor control system S-1128-248; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a)(1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
27. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
28. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
30. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-34-46

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 60, DIS# 41759-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District 220, 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 4305, 4306, and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9 [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
25. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520] Federally Enforceable Through Title V Permit
26. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, -128, -130, -144, -385, tank battery vapor control system S-1128-248; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a)(1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
27. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
28. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
30. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-35-37

EXPIRATION DATE: 02/29/2016

SECTION: SW36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 89) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 47 ppmvd @ 3% O₂ or 0.035 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 52.5 lb-CO/day, and 19,163 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-36-28

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND WITH SO₂ SCRUBBER AND FLUE GAS RECIRCULATION (CUSA ID #50-3-26C)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. SO_x emissions shall be reduced by 95% or to 9 ppmvd SO_x @ 3% O₂. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber liquor pH shall be maintained between 6 and 8 and shall be continuously monitored and recorded during operation of this unit. [District Rules 2201 and 2520, 9.4.1 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Scrubber mist eliminator shall be properly cleaned and maintained per the recommendations of the manufacturer. Each occurrence of the cleaning and maintenance shall be recorded. [District Rules 2201 and 2520, 9.4.1] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. The scrubber recirculation liquor liquid to gas ratio shall be recorded on a weekly basis. [District Rules 2201 and 2520, 9.4.1 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9 [40 CFR Part 64] Federally Enforceable Through Title V Permit
11. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Emissions from the steam generator shall not exceed any of the following limits: 0.13 lb-SO_x/MMBtu, 0.037 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4201, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
13. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, 4320, and 4405] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. A source test to demonstrate compliance with SO_x emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. Permittee shall retain on site an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6]
19. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Records of the scrubber liquor pH, occurrences of the cleaning and maintenance of the scrubber mist eliminator, and the scrubber liquid-to-gas ratio shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-48-32

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-4-26C)
EQUIPPED WITH A NORTH AMERICAN MAGNAFLAME GLE ULTRA-LOW NOX BURNER WITH SO2 SCRUBBER AND
FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
6. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Emissions from the steam generator shall not exceed any of the following limits: 0.324 lb-SO_x/MMBtu, 0.037 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
13. The permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
15. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
16. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
17. SO_x emissions shall be reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-56-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-5-26C, DIS# 43303-80) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.036 lb/MMBtu, SOx (as SO2): 0.070 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-57-22

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 LOW NOX BURNER AND FGR (#50-6 DIS #43012-81)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.087 lb-SO_x/MMBtu, 0.045 lb-PM₁₀/MMBtu, or 0.013 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SO_x is reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-58-24

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-7 DIS# 43013-81 WITH FGR AND NORTH AMERICAN GLE ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Section 26, T32S/R23E; Section 1, T30S/R21E; Section 36, T29S/R21E; NW/4 & SW/4 of Section 7, T30S/R22E; NE/4, NW/4, and SE/4 of Section 34, T30S/R22E; and SE/4 of Section 8, T30S/R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and vapor recovery gas volume flowmeter, or a volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305, 5.4, and 4306, 5.4] Federally Enforceable Through Title V Permit
5. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
6. Fuel gas sulfur content shall not exceed 5 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Permittee shall determine sulfur content of combusted gas annually. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 0.045 lb/MMBtu; or VOC: 0.013 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, 4406 and 4801] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmvd @ 3% O2, or CO: 0.025 lb/MMBtu or 33.8 ppmvd @ 3% O2. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
11. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54 lb-NOx/day, 9,855 lb-NOx/yr, 37.5 lb-CO/day, and 13,688 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit
14. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
17. The permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, permit number(s) of vapor recovery systems providing gas for incineration, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-66-29

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 82, DIS# 26753-80) WITH FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE FOR BLOWER MOTOR, AND O2 ANALYZER FOR FGR CONTROL

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 47 ppmvd @ 3% O₂ or 0.035 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 52.5 lb-CO/day, and 19,163 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-68-21

EXPIRATION DATE: 02/29/2016

SECTION: 01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 76, DIS# 43016-82) NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE, AND O2 CONTROLLER - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-75-24

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 91, DIS# 43001-85) WITH NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 1, T30S, R21E; SW 1/4 of Section 36, T29S, R21E; and SW 1/4 Section 6Z, T30S, R22E. [District Rule 2201 and District Rule 4102] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-76-25

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

69 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 93, DIS# 41751-09) WITH A NORTH AMERICAN GLE MAGNA-FLAME LOW-NOX BURNER, FLUE GAS RECIRCULATION, VARIABLE FREQUENCY DRIVE, AND O2 ANALYZER (PERMITTED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: NE 1/4 Section 26 and NW 1/4 Section 25, T32S, R23E; all of Section 1, R30S, T21E; NW 1/4 Section 7, R30S, T22E; Section 36, T31S, R23E; SW 1/4 Section 6, R30S, T22E; and all of Section 19 and 20, R30S, T22E. [District Rule 2201 and District Rule 4102] Federally Enforceable Through Title V Permit
3. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 29 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 21.2 lb-NOx/day, 7,737 lb-NOx/yr, or 34.8 lb-CO/day and 12,693 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-77-23

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 92, DIS# 43003-85) WITH A NORTH AMERICAN MODEL MAGNA FLAME GLE-4231 LOW NOX BURNER AND A WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: NE 1/4 Section 26 and NW 1/4 Section 25, T32S, R23E; SE 1/4 Section 1, R30S, T21E; NW 1/4 Section 7, R30S, T22E; Section 36, T31S, R23E; and SW 1/4 Section 6Z, T30S, R22E. [District Rule 4102]
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-79-19

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #95 (DIS#43007-85) EQUIPPED WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S/R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 28 ppmvd @ 3% O₂ or 0.020 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 30.5 lb-CO/day, and 11,114 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-80-21

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 96) WITH FGR - VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S, R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S, R21E; SE/4 and SW/4 of Sec. 36, T29S, R21E; and the SE/4 of Sec. 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-111-21

EXPIRATION DATE: 02/29/2016

SECTION: 06 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 72) WITH A NORTH AMERICAN MODEL #4231 G-LE MAGNA FLAME LOW-NOX BURNER WITH VARIABLE FREQUENCY DRIVE FOR THE BLOWER MOTOR, FGR, AN O2 ANALYZER FOR FGR CONTROL, AND APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This generator is approved to operate at the following locations: Sec. 6, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-112-24

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FLUE GAS RECIRCULATION (CUSA ID# 73) APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This generator is approved to operate at the following locations: Sec. 6, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320]
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rules 2520, 9.3.2 and 4320]
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201]
8. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
9. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 21.2 lb-NOx/day, 7,737 lb-NOx/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320]
11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320]

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-113-22

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 97) WITH A NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR - VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S, R23E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S, R21E; SE/4 and SW/4 of Sec. 36, T29S, R21E; and the SE/4 of Sec. 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-116-67

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-36W #1 SERVING 146 STEAM ENHANCED WELLS INCLUDING SIX AUTOMATIC WELL TEST STATIONS AND GAS PIPING TO SCRUBBED STEAM GENERATORS, SEPARATOR VESSEL FV-3A, DOGGR APPROVED DISPOSAL WELL(S), AND 460 MMBTU/HR JOHN ZINK MODEL #EEF-LHLS-24 AIR ASSISTED EMERGENCY FLARE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The air-assisted John Zink flare shall not discharge air contaminants into the atmosphere which exceeds 5% opacity or Ringelmann 1/4 for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The operation includes heat exchanger(s), gas/liquid separator(s), condensate tank(s), compressor(s), gas volume flow rate and temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The system includes gas piping from vapor control systems 36W #1 TEOR S-1128-116, 31X TEOR S-1128-128, 36W #2 TEOR S-1128-130, 5Z/6Z TEOR S-1128-144, 31X tank battery S-1128-248, Mckittrick Diatomite TEOR S-1129-864, and 1Y TEOR S-1128-385, and TEOR flow back vapor collection from Tulare formation wells (previously used for disposal). [District Rule 2201] Federally Enforceable Through Title V Permit
5. John Zink flare field sour gas line shall be equipped with an operational flow meter. John Zink flare pilot gas line shall be equipped with an operational flow meter and pilot fuel flow rate shall not exceed 20,000 scf/day of natural gas or 5,580 scf/day (153.8 gal/day) of liquid petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
6. Only PUC quality natural gas or liquified petroleum gas (LPG) shall be used as pilot gas in the flare. [District Rule 2020] Federally Enforceable Through Title V Permit
7. When operated, the flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Operation of flares for other than maintenance and testing shall be limited to unforeseen electrical power outages or emergencies (as defined below) that results in the inability to dispose of the vapors in devices approved for that purpose. Emergency is defined as an unforeseeable failure or malfunction of operating equipment that 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; 4) does not constitute a nuisance; and 5) results in the use of equipment exempted from offsets by Rule 2201 to prevent or ameliorate an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. The owner or operator shall notify the District of any emergency use of the flare within twenty four hours after confirmation that an actual flaring event has occurred. In the event that confirmation of an actual flaring event cannot be made, then the owner or operator shall notify the District no more than 24 hours after an alarm indicates that a flaring event may have occurred. [District Rule 1070 and 4311] Federally Enforceable Through Title V Permit
10. Operation of the flare shall not exceed 200 hours per year for purposes of flare maintenance and testing. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The air-assisted John Zink flare, for purposes of flare maintenance and testing, emissions rates shall not exceed any of the following: 0.068 lb NO_x/MMBtu (672 lb NO_x/year), 20,000 lb SO_x/year, 0.708 lb PM₁₀/MMBtu (3894 lb PM₁₀/year), 0.063 lb VOC/MMBtu (622 lb VOC/year) and 0.37 lb CO/MMBtu (3656 lb CO/year). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Sulfur compound combustion emissions shall not exceed 2000 ppmv as SO₂. [District Rule 4801] Federally Enforceable Through Title V Permit
13. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
14. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
15. The emergency flare shall be equipped with a functional continuous flame detection device to detect at least one pilot flame or to detect the presence of flare flame. [District Rule 4311] Federally Enforceable Through Title V Permit
16. Fugitive VOC emission rate from fugitive component counts of the TEOR vapor control system, calculated using U.S. EPA publication 453/R-95-017, Table 2-4, based on 50% VOC by weight of Total Organic Content (TOC), shall not exceed 268.3 lb/day. [District Rule 2210] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
18. If operator determines that the flow back system does not operate successfully, then the flow back system may be idled and/or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Existing Tulare injection wells are authorized to operate as either flow back wells or injection wells until such a time as the DOGGR injection permit for the existing Tulare injection wells is terminated. Upon termination of the Tulare injection well permit by DOGGR, the existing Tulare injection wells will continue to operate as flow back wells only or be idled and/or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
21. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
22. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
23. Emission rate from natural gas pilot gas shall not exceed any of the following: NO_x (as NO₂) - 0.1 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM₁₀ - 0.0076 lb/MMBtu, CO - 0.084 lb/MMBtu, or VOC - 0.0055 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
24. Emission rate from propane pilot gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM₁₀ - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. Permittee shall measure and maintain a daily record of flare pilot (LPG and natural gas) gas volumes, John Zink flare field sour gas volume, and shall maintain an annual record of the number of hours of operation of each flare. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s), and shall make such listings readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
27. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-118-24

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 628 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
4. Except for when casing vents or downstream valves are closed; noncondensable gas shall be piped to one or more of the following steam generators for incineration: S-1128-36; S-1128-48 or to tanks equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Casing vapor collection system shall be equipped with vapor flow rate indicator/recorder downstream of condensible recovery system measuring total flow rate. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Water/VOC condensate from all vapor recovery systems shall be pumped to condensate collection tank or field gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Vapors shall not be vented to the atmosphere if VOC combustion source is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum fugitive VOC emission rate from the well head casing vent vapor collection system shall not exceed 1,508.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Noncondensable sulfur compounds content shall not exceed 2,000 ppmv unless steam generators incinerating vapors are connected to flue gas scrubber if required to maintain compliance with sulfur emission limit. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain daily records of uncondensed casing vapor flow rate and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permit holder shall maintain updated well roster readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available to the APCO, California Air Resources Board (ARB), and EPA upon request. [District Rules 1070, 2520 and 4401] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-125-24

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 253 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND VAPOR PIPING TO STEAM GENERATORS S-1128-15, S-1128-18, AND VAPOR PIPING TIED INTO VAPOR RECOVERY LINE FROM SYSTEM LISTED UNDER PERMIT S-1128-617

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in gas processed shall not exceed 37% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permit holder shall maintain updated well roster readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Water/VOC condensate from all vapor recovery systems shall be pumped to condensate collection tank or field gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Vapors shall not be vented to the atmosphere if VOC combustion source is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum fugitive VOC emission rate from the well head casing vent vapor collection system shall not exceed 46.6 lb/day, as calculated according to District Policy SSP 2015 Procedures for Quantifying Fugitive VOC Emissions At Petroleum and SOCMF Facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate fugitive component counts for well vent vapor control systems and resulting emissions calculated using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c(Feb 1999) Screening Range emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except for when casing vents or downstream valves are closed; noncondensable gas shall be piped to one or more of the following steam generators for incineration: S-1128-15; S-1128-18 or to tanks equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-128-22

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-31X SERVING 60 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S), VAPOR COMPRESSOR(S), AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operation includes piping from pipeline vent pots 4, 5, and 6, heat exchanger(s), gas/liquid separator(s), gas/liquid separator S-1128-950, vapor compressor(s), and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 165.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a copy of DOGGR approval for each disposal well used for Rule 4401 compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
8. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520 and 4401] Federally Enforceable Through Title V Permit
9. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-130-21

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WVC SYSTEM CC-36W #2 SERVING 146 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S, DOGGR APPROVED DISPOSAL WELL(S), OR 5 AUTOMATIC WELL TEST VESSELS - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operation includes piping from pipeline vent pots 2 and 3 to casing gas collection line, vapor piping from 5 automatic well test vessels (AWTs) in Sec 36, T29S, R21E (2 at GS#2, 1 at GS#3 and 2 at GS#4), diverter valve piping from TEOR #CC-1Y (S-1128-385) discharge line (tying S-1128-385 to S-1128-130), heat exchanger(s), gas/liquid separator(s), vapor compressor(s), gas volume flow rate and temperature indicators, and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC content of hydrocarbons in gas processed shall not exceed 28% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions from components in vapor and condensate service shall not exceed 297.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using the EPA "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), Oil and Gas Production Operations Average Emission Factors, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520] Federally Enforceable Through Title V Permit
9. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401] Federally Enforceable Through Title V Permit
10. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-144-16

EXPIRATION DATE: 02/29/2016

SECTION: 05 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-5Z/6Z SERVING 33 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S) - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit
5. The operation includes heat exchanger(s), gas/liquid separator(s), vapor compressor(s), and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emissions shall not exceed 103.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520] Federally Enforceable Through Title V Permit
8. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520 and 4401] Federally Enforceable Through Title V Permit
9. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-154-30

EXPIRATION DATE: 02/29/2016

SECTION: 08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL/PRODUCED GAS FIRED STEAM GENERATOR (CUSA ID #14) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR (APPROVED FOR VARIOUS SPECIFIED LOCATIONS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.07 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.16 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with fuel gas (natural gas) and supplemental gas (produced gas) volumetric flow rate indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall measure and record the volume of fuel gas (natural gas) and supplemental gas (produced gas) burned in the steam generator on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall measure and record fuel gas (natural gas) and supplemental gas (produced gas) sulfur contents at least once per month. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 0.0033 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
10. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
11. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

12. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,855 lb-NOx/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-159-22

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (CUSA ID# 18-A)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 18, T30S, R22E and SE/4 of Sec. 8, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-160-7

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 16 STEAM DRIVE WELLS AND 18 CYCLIC WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. {1296} All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-161-10

EXPIRATION DATE: 02/29/2016

SECTION: 08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 65 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. Final vapor condenser shall utilize exhaust gas temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Condensate collection vessel shall be equipped with high efficiency mist eliminator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Mist eliminator shall be maintained in optimum operating condition. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Condensate shall be disposed of in manner preventing VOC emissions to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC emission rate shall not exceed 214.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-162-7

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 40 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
5. The operation shall be equipped with 2 heat exchangers, 1 gas liquid separator, 1 vapor compressor, and compressed vapor piping to authorized disposal/incineration devices. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-183-18

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

3,300 BBL FIXED ROOF PETROLEUM WASH TANK #T-1 WITH VAPOR CONTROL SYSTEM CONSISTING OF KNOCKOUT VESSEL(S), HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S) AND VAPOR COMPRESSOR(S) SHARED WITH S-1128-230, '231, '232, '278, '605, '608 AND '609 DISCHARGING TO STEAM GENERATOR S-1128-15, '18 AND/OR TEOR S-1128-125

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 1070, 2520, 9.4.2, and 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

7. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
8. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be equipped with a vapor control system consisting of a closed system that collects all VOCs from the storage tank and a VOC control device. The vapor control system shall be APCO-approved. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in District Rule 4623 Section 6.4.7. [District NSR Rule] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor control system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {979} Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4] Federally Enforceable Through Title V Permit
14. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
16. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
17. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

18. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
25. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Tank vapor control system shall include a gas blanketing line from field fuel gas line including one gas pressure regulator set at less than 15 psig and one pressure control valve regulated by sensing line set to open gas supply valve at 0.4 in H₂O. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Tank vapor control system shall include a vapor recovery line including one pressure control valve regulated by tank pressure sensing line set to open at pressures of 1.5 in H₂O, and piping from vapor recovery line to air cooled heat exchanger. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Vapor piping from vapor collection system to T.E.O.R. operation vapor collection piping shall be equipped with check valve to prevent vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
29. All tank roof vents, gauge hatches, and breather valves shall be installed and maintained at minimum release pressure of 0.125 psig and vacuum of 0.025 psig. [District NSR Rule] Federally Enforceable Through Title V Permit
30. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

31. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
33. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit
34. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. The API gravity and true vapor pressure (TVP) shall be determined using the latest methods specified in the most-recent version of District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
37. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
38. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
39. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
40. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
41. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-222-16

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

5000 BBL FREE WATER KNOCK-OUT TANK #T-1 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-224-12

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

10,000 BBL WASH TANK #T-3 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, re-inspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-225-13

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

10,000 BBL WASH TANK #T-4 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-226-12

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2000 BBL LACT TANK #T-5 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-227-12

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2000 BBL REJECT TANK #T-6 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-228-12

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1000 BBL REJECT TANK #T-8 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. Tank is not served by vapor control system S-1128-989 during District approved tank cleaning and maintenance procedures as described in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
5. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1. of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The API gravity and TVP shall be determined using District Rule 4623 test methods. [District Rule 1070]
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Instead of testing each fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 2520] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Operator shall keep a record of liquids stored in each container, API gravity, storage temperature, and the true vapor pressures of such liquids. [Rules 2520, 9.3 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
20. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
24. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-229-12

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

WEMCO AIR FLOATATION UNIT #W-1 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12 calendar month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
7. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
8. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-230-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

3300 BBL FIXED ROOF PETROLEUM WASH TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-231-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

2000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-232-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

2000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-248-45

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL TANK T-24 VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-250-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF STORAGE TANK (T-41) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-262-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-35) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-263-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-36) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-278-10

EXPIRATION DATE: 02/29/2016

SECTION: NW02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF SUMP REPLACEMENT TANK #T-154 WITH PRESSURE/VACUUM RELIEF VALVE

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-297-8

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

WEMCO M-1 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District NSR Rule and District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District NSR Rule and District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The tank shall vent to vapor control system listed in S-1128-248. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Emissions from this tank and associated tank vapor recovery system shall not exceed the amount specified on S-1128-248. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rules 2201] Federally Enforceable Through Title V Permit
16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
18. {969} All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. {970} A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. {971} An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. {972} Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. {973} Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. {974} If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. VOC content of hydrocarbons in TEOR gas processed by vapor control system shall be determined using ASTM Method E168, E169, or E260 as applicable, or equivalent test method with prior District approval measured upon startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 2201] Federally Enforceable Through Title V Permit
28. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
30. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-298-8

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

WEMCO M-2 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The tank shall vent to vapor control system listed in S-1128-248. [District NSR Rule] Federally Enforceable Through Title V Permit
4. True vapor pressure (TVP) of stored liquids shall be less than 0.5 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from this tank and associated tank vapor recovery system shall not exceed the amount specified on S-1128-248. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rules 2201] Federally Enforceable Through Title V Permit
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Permittee shall conduct vessel cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
12. Permittee shall notify the District compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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13. During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit
14. Prior to opening the vessel to allow vessel cleaning, one of the following procedures must be followed: 1) Exhaust VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; or 4) For oil/water separation vessels, the operator may degas the vessel vapor space by restricting the outflow of water and floating off the oil pad, such that at least 90 percent of the vessel volume is displaced. [District Rule 2080] Federally Enforceable Through Title V Permit
15. The vessel shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The vessel sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Prior to reintroducing crude oil/water to the vessel, the vessel shall be filled to the maximum possible level with water, the vessel vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular vessel maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that vessel cleaning was initiated, the date vessel cleaning was completed, the procedure used to vent vessel vapors prior to opening, the method of vessel cleaning used, and a description of internal and external vessel repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
20. {969} All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. {970} A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. {971} An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. {972} Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. {973} Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. {974} If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. The operator shall keep accurate records of types, storage temperature and the true vapor pressure of liquids stored. Such records shall be retained for a minimum of five years and made available by the APCO for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
29. VOC content of hydrocarbons in TEOR gas processed by vapor control system shall be determined using ASTM Method E168, E169, or E260 as applicable, or equivalent test method with prior District approval measured upon startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
30. For crude oil with an API gravity of 20 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
31. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
32. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 2201] Federally Enforceable Through Title V Permit
33. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. {941} The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-302-7

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

8.4 MMBTU/HR NATURAL GAS-FIRED BOILER #3 WITH A CLEAVER BROOKS MODEL ICH84GX30S LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM

PERMIT UNIT REQUIREMENTS

1. Units S-1128-7, -8, and -302 shall be equipped with a master fuel flow meter. Annual fuel use for each unit shall be calculated based on hours of operation of each unit and total fuel use from master meter. [District Rules 4306 and NSR] Federally Enforceable Through Title V Permit
2. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
4. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules NSR and 4406] Federally Enforceable Through Title V Permit
9. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the fuel gas being fired in the steam generator shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, double GC for H2S and mercaptans, or grab sample analysis by double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. If the steam generator is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and 4306] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3 and Kern County Rules 404 and 408] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: SOx (as SO2): 0.00285 lb/MMBtu; PM10: 0.0075 lb/MMBtu; or VOC: 0.0054 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, 4406 and 4801] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.036 lb/MMBtu or 30 ppmvd @ 3% O2, or CO: 0.0824 lb/MMBtu or 112 ppmvd @ 3% O2. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
15. Total heat input to this unit shall be less than 30 billion Btu per calendar year. [District Rule 4306] Federally Enforceable Through Title V Permit
16. During start-up and shutdown periods emissions from the boiler shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.0824 lb-CO/MMBtu. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
17. Maximum emissions from the boiler, including start-up and shutdown, shall not exceed any of the following limits: 19.8 lb-NOx/day, 1080 lb-NOx/yr, 16.6 lb-CO/day, and 2472 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306] Federally Enforceable Through Title V Permit
19. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
26. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas h_hv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305 and 4306] Federally Enforceable Through Title V Permit
28. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
29. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306] Federally Enforceable Through Title V Permit
31. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306] Federally Enforceable Through Title V Permit
32. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any non-certified fuel and record specific type of noncertified fuel used.. [District Rule 2520, 9.4.2 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
34. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
35. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306] Federally Enforceable Through Title V Permit
36. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 1081 (Amended December 16, 1993), 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-303-10

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

5.23 MMBTU/HR NATURAL GAS FIRED CLEAVER-BROOKS BOILER #F-2 WITH A CLEAVER BROOKS MODEL CB-700X-125-15 BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. This unit shall be equipped with a totalizing, non-resettable fuel flow meter. [District Rule 4306 and NSR] Federally Enforceable Through Title V Permit
2. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
4. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the fuel gas being fired in the steam generator shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, double GC for H₂S and mercaptans, or grab sample analysis by double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the steam generator is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and 4306] Federally Enforceable Through Title V Permit
11. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NO_x testing, except for natural gas purchased from a PUC regulated utility. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3 and Kern County Rules 404 and 408] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: SO_x (as SO₂): 0.00285 lb/MMBtu; PM₁₀: 0.0075 lb/MMBtu; or VOC: 0.0054 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, and 4801] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup and shutdown, shall not exceed any of the following: NO_x (as NO₂): 0.036 lb/MMBtu or 30 ppmvd @ 3% O₂, or CO: 0.0824 lb/MMBtu or 112 ppmvd @ 3% O₂. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
15. Total heat input to this unit shall be less than 30 billion Btu per calendar year. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
16. During start-up and shutdown periods emissions from the boiler shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.0824 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Maximum emissions from the boiler, including start-up and shutdown, shall not exceed any of the following limits: 12.3 lb-NO_x/day, 1,080 lb-NO_x/yr, 10.3 lb-CO/day, and 2,472 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306] Federally Enforceable Through Title V Permit
19. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
26. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas h_hv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305 and 4306] Federally Enforceable Through Title V Permit
28. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
29. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306] Federally Enforceable Through Title V Permit
31. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306] Federally Enforceable Through Title V Permit
32. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any non-certified fuel and record specific type of noncertified fuel used.. [District Rule 2520, 9.4.2 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
34. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
35. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306] Federally Enforceable Through Title V Permit
36. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 1081 (Amended December 16, 1993), 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-305-5

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-306-6

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

600 BHP CUMMINS MODEL KTA1965T DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-307-5

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-366-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 1,307 lb-SO_x/year; 8,495 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. To determine compliance with NOx emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
35. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-367-19

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 1,307 lb-SO_x/year; 8,495 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. To determine compliance with NOx emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
35. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-368-19

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# CG-3) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 1,307 lb-SOx/year; 8,495 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1(iii)(B)] Federally Enforceable Through Title V Permit
34. To determine compliance with NOx emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
35. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-369-19

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# CG-4) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 1,307 lb-SO_x/year; 8,495 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. To determine compliance with NOx emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
35. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-370-22

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.031 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1164.1 lb-CO/day; 82.4 lb-SO_x/day; 55.5 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 30,061 lb-SO_x/year; 20,258 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1(iii)(B)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-371-22

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.031 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1164.1 lb-CO/day; 82.4 lb-SO_x/day; 55.5 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 30,061 lb-SO_x/year; 20,258 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NO_x shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x concentration or diluent O₂ (or both). [40 CFR 60.334(j)(1)(iii)(B)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-372-21

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-3) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NOx @ 15% O2 referenced as NO2; 44 ppmvd CO @ 15% O2 when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O2 when firing gas turbine only; 0.031 lb-PM10/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NOx/day referenced as NO2; 1164.1 lb-CO/day; 82.4 lb-SOx/day; 55.5 lb-PM10/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 30,061 lb-SO_x/year; 20,258 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-373-21

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-4) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR DUCT BURNER (NOMINAL RATING) WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NOx @ 15% O2 referenced as NO2; 44 ppmvd CO @ 15% O2 when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O2 when firing gas turbine only; 0.031 lb-PM10/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NOx/day referenced as NO2; 1164.1 lb-CO/day; 82.4 lb-SOx/day; 55.5 lb-PM10/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 30,061 lb-SOx/year; 20,258 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-374-15

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 31X CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-374 or -375) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-374 and S-1128-375 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-374 or S-1128-375), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NO_x shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x concentration or diluent O₂ (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. NOx emissions shall not exceed 42 ppmvd @ 15% O2 (1-hour average), excluding startup (black start), shutdown and reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2)] Federally Enforceable Through Title V Permit
48. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
51. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-375-15

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 31X CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-374 or -375) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-374 and S-1128-375 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-374 or S-1128-375), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NO_x shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x concentration or diluent O₂ (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
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38. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

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40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. NOx emissions shall not exceed 42 ppmvd @ 15% O2 (1-hour average), excluding startup (black start), shutdown and reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2)] Federally Enforceable Through Title V Permit
48. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
51. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-376-14

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-376 or -377) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-376 and S-1128-377 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-376 or S-1128-377), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-377-14

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-376 or -377) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-376 and S-1128-377 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-376 or S-1128-377), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NOx emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
35. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
36. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
37. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

40. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
44. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-385-63

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-1Y SERVING 770 STEAM ENHANCED WELLS INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, GAS FLOW AND TEMPERATURE INDICATORS, AUTOMATIC WELL TEST STATIONS, AND GAS PIPING TO SCRUBBED STEAM GENERATORS, OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. The operation includes gauge vessel(s), heat exchanger(s), gas/liquid separator(s), condensate tank(s), vapor compressor(s), gas volume flow rate and temperature indicators, and gas piping to either TEOR permit S-1128-116 collection system, TEOR permit S-1128-130 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in gas processed shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from components in vapor and condensate service shall not exceed 380.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components to be screened and counted for determining compliance with fugitive VOC limit listed above shall be identified and categorized according to the appropriate fluid types (gas or water/oil) in Table 2-4 of the EPA's "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017) and the following component types: valves, fittings, threaded connections, open-ended lines, pumps, compressors, pressure relief devices, pipes, flanges, process drains, sealing mechanisms, hatches, sight-glasses, meters, or seal fluid systems. [District Rule 2201] Federally Enforceable Through Title V Permit
7. {1296} All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall maintain for a period of five years, accurate daily records of volume of vapors handled, a list of all thermally enhanced production wells associated with this operation, accurate records of fugitive inspection component counts and leak inspection results, and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using the EPA "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), Oil and Gas Production Operations Average Emission Factors, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall keep steam-enhanced crude oil production wells operated with open vents connected to a VOC collection and control system. Steam-enhanced crude oil production wells operated with closed vents shall produce to front-line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) and are connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
13. Permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
14. The inspection and re-inspection requirements of Rule 4401, Sections 5.8.1 through 5.8.5, do not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent or less (10 wt. %) as determined using ASTM Method D1945 for gases and SCAQMD Method 304-91, or the latest revision of ASTM Methods E168, E169 or E260, for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit
15. Permittee shall maintain a current listing of wells with a packer installed and include the label "Packer" on wells with packers. Wells with a packer are not subject to VOC emissions checks and are not open-ended lines under Rule 4401. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
16. The requirements of Rule 4401 do not apply to components serving the produced fluid line. [District Rule 4401] Federally Enforceable Through Title V Permit
17. Except for the requirements of Sections 6.1, 6.6.6, and 7.2 of Rule 4401, the requirements of Rule 4401 shall not apply to the following components: pressure relief devices, pumps, and compressors that are enclosed and whose emissions are controlled with an operating VOC collection and control system, components buried below ground, components used exclusively in vacuum service, and one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using EPA Test Method 21. [District Rule 4401] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-390-10

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

797 CYCLIC WELLS WITH CLOSED CASING VENTS

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PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC

Location: HEAVY OIL WESTERN STATIONARY SOURCE, KERN COUNTY

S-1128-390-10 : Jun 9 2021 9:51AM -- YOSHIMUJ

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-400-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF FWKO TANK (T-11) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-401-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF FWKO TANK (T-12) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-402-13

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

360 BBL FIXED ROOF CONSTANT LEVEL CRUDE OIL STORAGE TANK (T-19) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-404-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF WASH TANK (T-21) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-405-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF WASH TANK (T-22) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-406-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF WASH TANK (T-23) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-407-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-40) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-409-8

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

214,326 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-411-9

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-31) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-412-9

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-32) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-416-5

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

7,602 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-425-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

11,004 GALLON FIXED ROOF DRAIN TANK TS #5

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-426-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

11,004 GALLON FIXED ROOF DRAIN TANK TS #7

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-427-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

11,004 GALLON FIXED ROOF DRAIN TANK TS #6

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-428-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

11,004 GALLON FIXED DRAIN TANK TS #4

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC

Location: HEAVY OIL WESTERN STATIONARY SOURCE, KERN COUNTY

S-1128-428-5 : Jun 9 2021 9:51AM -- YOSHIMUJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-431-5

EXPIRATION DATE: 02/29/2016

SECTION: NW1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-435-5

EXPIRATION DATE: 02/29/2016

SECTION: SE1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

211,596 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-438-5

EXPIRATION DATE: 02/29/2016

SECTION: SW5 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-455-5

EXPIRATION DATE: 02/29/2016

SECTION: SE08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-605-9

EXPIRATION DATE: 02/29/2016

SECTION: NW2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK #T-5 WITH VAPOR CONTROL SYSTEM SHARED WITH TANK S-1128-183

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-608-9

EXPIRATION DATE: 02/29/2016

SECTION: NW2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF WASTE WATER TANK #T-158B WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-183

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PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-609-9

EXPIRATION DATE: 02/29/2016

SECTION: NW02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF WASTE WATER TANK #T-158A WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-183

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
9. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
10. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall vent only to the vapor control system listed on permit S-1128-183. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly gas sampling to qualify for exemption from fugitive component counts for components handling fluids with 10% VOC or less by weight. If fluids sampled are 10% VOC or less by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
16. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All piping, fittings, valves, and roof appurtenances shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Noncondensable vapor from tanks and free water knockout vessel shall not be vented to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
24. There shall be no vapor backflow into tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Steam plant downtime due to scheduled maintenance shall not exceed 3 hours without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. {1740} This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {1741} This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit
30. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
32. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
33. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-610-5

EXPIRATION DATE: 02/29/2016

SECTION: NW2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

59,178 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-617-25

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618,-620,-621,-622, -623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND '18 VIA 31E BOOSTER STATION OR TEOR VAPOR COLLECTION SYSTEM S-1128-125 (31EOCP)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Emissions from this tank and vapor control system shall not exceed 101.0 lbs VOC per day [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Permittee shall conduct API gravity and true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The efficiency of any VOC destruction device shall be measured by EPA Method 18 or 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times except as otherwise provided in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The API gravity and true vapor pressure (TVP) shall be determined using the latest methods specified in the most-recent version of District Rule 4623. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) prior to venting the tank to the atmosphere, operate the tank vapor control system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) vent the tank to a vapor control device/vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Within 48 hours after refilling the tank, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA Method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
25. {982} Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
26. {983} The requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {984} The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-618-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF LACT TANK #T-4 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
4. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
5. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
7. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
8. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
10. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Emissions from this tank shall not exceed 1.9 lbs VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
22. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
23. This unit does not store organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
27. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-621-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

775 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-7 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
4. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 1070, 2520, 9.4.2, and 4623, 6.4.2] Federally Enforceable Through Title V Permit
5. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.4.2, and 4623, 6.4.4] Federally Enforceable Through Title V Permit
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
7. Control efficiency shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported.. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

8. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
10. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Emissions from this tank shall not exceed 3.0 lbs VOC per day [District NSR Rule] Federally Enforceable Through Title V Permit
14. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
22. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
23. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
27. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
28. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
29. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-622-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

3,300 BBL FIXED ROOF PETROLEUM WASH TANK #T-2 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
4. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 1070, 2520, 9.4.2, and 4623, 6.4.2] Federally Enforceable Through Title V Permit
5. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.4.2, and 4623, 6.4.4] Federally Enforceable Through Title V Permit
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
7. Control efficiency shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported.. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
10. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Emissions from this tank shall not exceed 3.0 lbs VOC per day [District NSR Rule] Federally Enforceable Through Title V Permit
14. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
22. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
23. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
27. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
28. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
29. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-623-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

3,020 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-1 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
4. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 1070, 2520, 9.4.2, and 4623, 6.4.2] Federally Enforceable Through Title V Permit
5. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.4.2, and 4623, 6.4.4] Federally Enforceable Through Title V Permit
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
7. Control efficiency shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported.. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
10. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Emissions from this tank shall not exceed 2.8 lbs VOC per day [District NSR Rule] Federally Enforceable Through Title V Permit
14. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
22. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
23. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
27. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
28. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
29. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-625-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-3 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
4. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 1070, 2520, 9.4.2, and 4623, 6.4.2] Federally Enforceable Through Title V Permit
5. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.4.2, and 4623, 6.4.4] Federally Enforceable Through Title V Permit
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
7. Control efficiency shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported.. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
10. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
11. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Emissions from this tank shall not exceed 2.9 lbs VOC per day [District NSR Rule] Federally Enforceable Through Title V Permit
14. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
22. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
23. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended May 16, 2002) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
27. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
28. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
29. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-633-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

68,502 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-635-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

43,764 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-636-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

68,502 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-637-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

21,126 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-638-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

9,408 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-639-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

43,764 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-640-5

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

21,126 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-690-5

EXPIRATION DATE: 02/29/2016

SECTION: NE25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

42,000 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-691-5

EXPIRATION DATE: 02/29/2016

SECTION: NE25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

67,242 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-692-5

EXPIRATION DATE: 02/29/2016

SECTION: NE25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

67,242 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-694-5

EXPIRATION DATE: 02/29/2016

SECTION: NE25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,344 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-698-5

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

8,652 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-699-5

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

43,764 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-700-5

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

150,318 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-701-14

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

75,138 GALLON FIXED ROOF STORAGE TANK WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C EFFLUENT PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance conditions, Heavy Oil Tank Cleaning conditions, and Heavy Oil Tank Testing conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12 calendar month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
5. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
8. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-702-5

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

150,318 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-703-13

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

42,294 GALLON FIXED ROOF STORAGE TANK WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C EFFLUENT PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12 calendar month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
7. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
8. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request.
[District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-704-5

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

124,740 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-705-9

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

83,160 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-706-5

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

212,100 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-707-9

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

83,160 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
6. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
9. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1. through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-708-5

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,386 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-709-5

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

43,764 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-713-5

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,344 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-717-5

EXPIRATION DATE: 02/29/2016

SECTION: SW25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

21,882 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-839-7

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:
20 UNCONTROLLED CYCLIC WELLS

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PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. All wells authorized by this permit to operate shall be located more than 1000 feet from an existing well vent vapor recovery system operated by the company. [District Rule 4401, 4.5.1] Federally Enforceable Through Title V Permit
3. A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-921-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

158 STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

DRAFT

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. {1294} The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-923-11

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2,000 BARREL DRAIN TANK, T-905C, WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12 calendar month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Pressure control valves shall be set to regulate gas blanket feed between 0.4 in. w.c. vacuum and 1.5 in. w.c. pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Crude oil introduced into the tank shall be blended prior to introduction into tank and shall have an API gravity of 20 degrees or less as determined by ASTM 287. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
7. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
8. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-934-13

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS

PERMIT UNIT REQUIREMENTS

1. {649} Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. Upon District request, a two hour observation shall be conducted. [40 CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. {652} The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. {654} Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is air-assisted or steam-assisted. [40 CFR 60.18 (c)(3)] Federally Enforceable Through Title V Permit
6. The net heating value of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(f)(3) and using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3-6)] Federally Enforceable Through Title V Permit
7. {657} Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
8. {658} Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit
9. {659} Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than the velocity, V_{max} , as determined by the equation specified in paragraph 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
10. {660} The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. {661} Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)] Federally Enforceable Through Title V Permit
12. If flare is not operating, gas shall not be vented to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Gas flow rate to flare, except pilot and purge gas, shall not exceed 419,000 dscf per day. [District Rule 2201]
14. Gas flow rate to flare, except pilot and purge gas, shall not exceed 2,500,800 dscf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined daily flow rate of pilot and purge gas shall not exceed 20,000 dscf of natural gas per day or 5,580 scf/day (153.8 gal/day) of liquefied petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
16. Concentration of sulfur (as H₂S) in gas flared shall not exceed 30,000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall determine the moisture content of flared gas during an actual flaring episode at least once each calendar quarter in which a flare episode occurs. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall determine sulfur content of gas flared at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Emissions from flared gas shall not exceed any of the following (based on total gas combusted): PM-10: 6.4 lb/mmscf; NO_x (as NO₂): 54.4 lb/mmscf; VOC: 50.4 lb/mmscf; or CO: 296.0 lb/mmscf. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Emission rate from natural gas pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.1 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM₁₀ - 0.0076 lb/MMBtu, CO - 0.084 lb/MMBtu, or VOC - 0.0055 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
21. Emission rate from LPG/propane pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM₁₀ - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
22. Permittee shall maintain daily and annual records of pilot and purge gas flow volumes (LPG/propane and natural gas), daily and annual records of wet & calculated dry flared gas flow volumes, quarterly records of flared gas moisture content, and annual records of flared gas sulfur content. Records shall be kept for at least five years and shall be made readily available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-935-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,156 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-13) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-936-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

12,086 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-25) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-938-9

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

380 BBL CONSTANT LEVEL CRUDE OIL SURGE TANK (T-18) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-940-8

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

16,000 GALLON WEMCO M-3 TANK WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rules 4623, 5.3.1 and NSR] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2] Federally Enforceable Through Title V Permit
4. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
6. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Operator shall keep a record of liquids stored in each container, storage temperature, the Reid vapor pressure and daily throughput of such liquids. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year, annually during summer and whenever there is a change in the source or type of petroleum entering the tank. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3] Federally Enforceable Through Title V Permit
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4] Federally Enforceable Through Title V Permit
16. The efficiency of any VOC destruction device shall be measured by USEPA Method 18, 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. True vapor pressure (TVP) of liquids processed shall not exceed 5.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
20. The liquid processed in this WEMCO unit shall be at constant level. [District NSR Rule] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-941-9

EXPIRATION DATE: 02/29/2016

SECTION: SE08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.05 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [Rule 2201] Federally Enforceable Through Title V Permit
4. {2417} Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NOx emissions from the steam generator shall not exceed 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O2 or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,855 lb-NOx/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-949-4

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
4. Emissions from this engine shall not exceed any of the following limits: 3.7 g-NO_x/bhp-hr , 0.1 g-PM₁₀/bhp-hr, 0.5 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.1 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [13 CCR 2423 and 17 CCR 93115]
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-950-2

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

UP TO 14' O.D. X 61' (1670 BBL) CRUDE OIL INLET GAS SEPARATOR VESSEL V-2A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-128

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Maintenance and Inspection Conditions on the facility wide permit S-1128-0. Deviations from a standard shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vapors from separator vessel V-2A shall be routed to casing collection system S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Separator vessel V-2A shall not receive production from wells operated with closed casing vents when the vapor control system is inoperable. For thermally enhanced oil recovery wells producing to separator, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of total organic compounds in gas processed by separator vessel V-2A shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall determine VOC content of total organic compounds in gas within 60-days of startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in vapor service dedicated to separator vessel V-2A shall not exceed 7.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The fugitive VOC emission limit listed above does not include components in liquid service, or existing production handling and flow measurement facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate records of VOC content of total organic compounds in gas and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-951-4

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
4. Emissions from this engine shall not exceed any of the following limits: 3.7 g-NO_x/bhp-hr , 0.5 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.1 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-952-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

30.0 MMBTU/HR NATURAL GAS, PROPANE, OR BUTANE-FIRED STRUTHERS STEAM GENERATOR S/N 75/76-37153-2 WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (ALSO PERMITTED AS S-2010-200 IN LOW SS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
4. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
5. This steam generator is authorized to operate at CUSA's light oil western stationary source (LOWSS) as permit S-2010-200 or CUSA's heavy oil western stationary source as permit S-1128-952. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The District shall be notified at least 7 days prior to each transfer between District approved locations, giving the exact location of the move. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Production from wells thermally enhanced by this steam generator shall be routed only to existing vapor controlled tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total sulfur content of fuel combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
9. Source testing for NOx and CO for each approved fuel shall be conducted within 60 days of first firing on fuel. [District Rule 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
11. Except during startup and shutdown emission rates shall not exceed any of the following: PM10: 0.0076 lb/MMBTU, NOx (as NO2): 12 ppmv @ 3% O2 or 0.014 lb/MMBTU, VOC: 0.0055 lb/MMBTU, or CO: 50 ppmv @ 3% O2. [District Rule 2201 and District Rule 4306] Federally Enforceable Through Title V Permit
12. Unit shall not be located within 1000 ft of a school. [CH&SC 42301.6]
13. Formerly S-1128-927.

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-954-6

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 12N **RANGE:** 23E

EQUIPMENT DESCRIPTION:

6000 BBL OR LESS FIXED ROOF CRUDE OIL TANK SERVED BY THE VAPOR RECOVERY SYSTEM LISTED ON TANK S-1128-617

PERMIT UNIT REQUIREMENTS

1. Tank shall be designed and maintained to vent only to vapor collection system, permit S-1128-617, except during periods of vessel cleaning or vapor control system maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of the liquids stored in this tank shall not exceed 0.5 psia. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 from the total number of vapor components associated with tank and vapor control system shall not exceed 7.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in a representative tank upon startup and at least once every 24 months thereafter during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. [District Rule 4623] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
6. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
9. Flanges shall be monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit
11. All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201] Federally Enforceable Through Title V Permit
13. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
16. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in a representative tank shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 4623] Federally Enforceable Through Title V Permit
18. True vapor pressure shall be measured using the latest version of Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and US EPA. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
19. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations Average Emissions Factors (EPA 453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Operator shall notify the District in writing at least 72 hours prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information: (1) The PTO number and physical location of the tank being degassed, (2) The date and time that tank degassing and cleaning activities will begin, (3) The degassing method, as allowed in this permit, to be used, and (4) The method to be used to clean the tank, including any solvents to be used. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Prior to opening the tank to allow tank cleaning, one of the following degassing procedures must be followed: 1) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; 4) For free-water knockout tanks, the operator may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced; or 5) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained. [District Rule 2080] Federally Enforceable Through Title V Permit
25. During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit
26. To facilitate connection to an external APCO-approved vapor recovery system a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may use the following cleaning agents: clean (produced) water, diesel, solvents with an initial boiling point of greater than 302 °F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
29. When storing organic liquid of TVP less than 0.5 pisa, prior to returning the tank to normal operation, the tank vapor control system shall either be reactivated and the pressure/relief valves closed, or the tank shall be filled to the maximum possible level with water or a liquid with a TVP less than 0.5 psia and the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall then be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
30. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

33. The permittee shall keep accurate records of liquids stored, TVP and API gravity of such liquids. [District Rule 4623] Federally Enforceable Through Title V Permit
34. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-955-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

225 BHP CATERPILLAR MODEL C7 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE SERVED BY A AZ PURIFIER OXIDATION CATALYST WITH CLOSED CRANKCASE VENTILATION (CCV) SYSTEM POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. Emissions from this IC engine shall not exceed any of the following limits: 2.9 g-NOx/bhp-hr, 0.54 g-CO/bhp-hr, or 1.12 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an Exhaust Gas Temperature (EGT) thermometer immediately upstream of the oxidation catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation the Exhaust Gas Temperature (EGT) of this engine shall not exceed 640° C. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the EGT of the engine. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
20. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 2520 and 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-956-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

225 BHP CATERPILLAR MODEL C7 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE SERVED BY A AZ PURIFIER OXIDATION CATALYST WITH CLOSED CRANKCASE VENTILATION (CCV) SYSTEM POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. Emissions from this IC engine shall not exceed any of the following limits: 2.9 g-NOx/bhp-hr, 0.54 g-CO/bhp-hr, or 1.12 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an Exhaust Gas Temperature (EGT) thermometer immediately upstream of the oxidation catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation the Exhaust Gas Temperature (EGT) of this engine shall not exceed 640° C. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the EGT of the engine. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
20. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 2520 and 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-957-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS, MODEL QSM11-G4, DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 300 KW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 2.33 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.17 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
7. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-958-3

EXPIRATION DATE: 02/29/2016

SECTION: SW 31 **TOWNSHIP:** 29 S **RANGE:** 22 E

EQUIPMENT DESCRIPTION:

15,000 GALLON WEMCO M-4 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
2. VOC content of total hydrocarbons in gas processed by the vapor control system, upstream of compressors, shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The vessel shall vent to vapor control system listed in S-1128-248. [District NSR Rule] Federally Enforceable Through Title V Permit
4. True vapor pressure (TVP) of stored liquids shall be less than 0.5 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from this vessel and associated vessel vapor control system shall not exceed the amount specified on S-1128-248. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The vessel shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rules 2201] Federally Enforceable Through Title V Permit
7. Any vessel gauging or sampling device on a tank vented to the vapor control system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Permittee shall conduct vessel cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
12. Permittee shall notify the District compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit
14. Prior to opening the vessel to allow vessel cleaning, one of the following procedures must be followed: 1) Exhaust VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; or 4) For oil/water separation vessels, the operator may degas the vessel vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the vessel volume is displaced. [District Rule 2080] Federally Enforceable Through Title V Permit
15. The vessel shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The vessel sediment shall be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Prior to reintroducing crude oil/water to the vessel, the vessel shall be filled to the maximum possible level with water, the vessel vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular vessel maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that vessel cleaning was initiated, the date vessel cleaning was completed, the procedure used to vent vessel vapors prior to opening, the method of vessel cleaning used, and a description of internal and external vessel repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
20. {969} All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. {970} A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. {971} An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. {972} Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. {973} Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. {974} If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. {975} Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. The operator shall keep accurate records of types, storage temperature and the true vapor pressure of liquids stored. Such records shall be retained for a minimum of five years and made available by the APCO for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this vessel at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
29. For crude oil with an API gravity of 20 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
30. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 2201] Federally Enforceable Through Title V Permit
32. The operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. {941} The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-959-1

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E. [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-960-1

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E . [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-961-1

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E . [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-974-4

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 1,000 barrels per day and 300,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-975-4

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-976-4

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-977-4

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-978-2

EXPIRATION DATE: 02/29/2016

SECTION: SW 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

250 HORSEPOWER CUMMINS MODEL QSB7-G3 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE
POWERING AN ELECTRICAL GENERATOR (31X CONTROL ROOM, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-3 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 0.746 g-CO/bhp-hr, or 0.149 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed 0.082 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-979-1

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 HP CUMMINS MODEL QSM11-G4 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #4, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-3 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 2.34 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.123 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-980-1

EXPIRATION DATE: 02/29/2016

SECTION: NE36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

755 HP CUMMINS MODEL QSX15-G9-NR2 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #5, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-2 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 4.04 g-NOx/bhp-hr, 0.522 g-CO/bhp-hr, or 0.213 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.097 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-981-4

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

TEOR OPERATION WITH UP TO 100 WELLS, INCLUDING OPEN OR CLOSED CASING VENTS, WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, WITH THE VAPORS PIPED TO THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617 AND/OR FLARE S-1128-1004

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The Permittee shall maintain with the permit accurate fugitive component counts for components in gas/vapor service, and the resulting emissions calculations using the emissions factors in Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of the non-condensable casing vapors shall not exceed 70% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive emissions from the TEOR system components shall not exceed 53 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall test the TEOR gas annually for VOC content at the header upstream of the 31E Oil Cleaning Plant. [District Rule 2201] Federally Enforceable Through Title V Permit
6. For wells with the casing vents open, the well vent shall be connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
7. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.6.2.1] Federally Enforceable Through Title V Permit
8. There shall be no components with a major liquid leak as defined in Section 3.20.2 of Rule 4401. [District Rule 4401, 5.6.2.2] Federally Enforceable Through Title V Permit
9. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.6.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401, 5.6.2.4] Federally Enforceable Through Title V Permit
11. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.7.3] Federally Enforceable Through Title V Permit
12. Unless otherwise specified in Section 5.8, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.8] Federally Enforceable Through Title V Permit
13. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.8.5] Federally Enforceable Through Title V Permit
14. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.8.6] Federally Enforceable Through Title V Permit
15. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401, 5.9.4] Federally Enforceable Through Title V Permit
16. The time of the initial leak detection shall be the start of the repair period specified in Table 4. [District Rule 4401, 5.9.6] Federally Enforceable Through Title V Permit
17. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
18. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
19. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.9] Federally Enforceable Through Title V Permit
20. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
21. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.11] Federally Enforceable Through Title V Permit
22. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to this Rule by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components, 5) Except for pipes, the location of components subject to this Rule, 6) Except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by this Rule and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 through 6.6.9] Federally Enforceable Through Title V Permit
24. The operator of any new steam-enhanced crude oil production well, or any non-steam-enhanced crude oil production well converted to a steam-enhanced crude oil production well, which commences steam-enhancement operations on or after April 11, 1991, shall comply with the requirements of this rule and the applicable permit requirements of Rule 2201 (New and Modified Stationary Source Review Rule) before steam injection and no later than the first detectable flow at the casing vent. [District Rule 4401, 7.1] Federally Enforceable Through Title V Permit
25. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.3, 4.4, 4.5, 4.8 or 4.9 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of this rule. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit
26. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-986-1

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

10,500 GALLON (250 BBL) OPEN TOP PETROLEUM STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-989-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

26 C OIL CLEANING PLANT VAPOR CONTROL SERVING TANKS S-1128-222, '-224, '-225, '-226, '-227, '-228, '-229, '-701, '-703, '-923, AND '-1015 INCLUDING 561,000 BTU/HR HEAT EXCHANGER, KNOCKOUT VESSEL, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1128-36, '-48, S-1141-553, '-554, AND '-555, FLARE S-1141-513, AND APPROVED INJECTION WELL(S)

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall consist of a closed system that collects VOCs from the District approved knockout vessel(s) and storage tanks and discharges to District approved VOC control devices. The vapor control system shall be APCO-approved. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99% by weight as determined by the test method(s) specified in District Rule 4623. [District Rules 2201] Federally Enforceable Through Title V Permit
2. Vapor control equipment compressor shall activate before the pressure relief valve vents on any of the units served by the vapor control equipment when operational. Vapor recovery system may be inoperable during maintenance/repairs/upset conditions for up to 600 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control system may be inoperable during maintenance/repairs/upset conditions of tanks S-1128-222, '-224, '-225, '-226 through '-229, '-701, '-703, '-923 and/or '-1015 for up to 600 hours per year. District-approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum VOC content of vapor in the vapor recovery system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-991-4

EXPIRATION DATE: 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is permitted to operate at the following locations: 2F (NW/4 of Sec 2, T12N, R24W), 31E (SW/4 of Sec 31, T12N, R23W), 26C (SE/4 of Sec 26, T32S, R23E), Station 1-09 (SW/4 of Sec 9, T32S, R23E), Station 2-22 (SE/4 of Sec 22, T31S, R22E) and 21S Seep (SE/4 of Sec 21, T32S, R23E). [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.49 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Crude oil throughput shall not exceed 475 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from the tank shall not exceed 24.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-992-4

EXPIRATION DATE: 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is permitted to operate at the following locations: 2F (NW/4 of Sec 2, T12N, R24W), 31E (SW/4 of Sec 31, T12N, R23W), 26C (SE/4 of Sec 26, T32S, R23E), Station 1-09 (SW/4 of Sec 9, T32S, R23E), Station 2-22 (SE/4 of Sec 22, T31S, R22E) and 21S Seep (SE/4 of Sec 21, T32S, R23E). [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.49 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Crude oil throughput shall not exceed 475 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from the tank shall not exceed 24.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-993-3

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2,076 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (26C FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 3000 barrels per day or 105,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 165.5 lb/day or 11,906 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
12. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-994-5

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,600 BBL FREE WATER KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND ' -556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND ' -48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-995-5

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,600 BBL FREE WATER KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '-556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '-48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-996-2

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

150 BBL EMERGENCY USE VESSEL (V-120) (26C FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201] Federally Enforceable Through Title V Permit
4. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that: 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; and 4) is necessary to prevent or control an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The owner or operator shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
14. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-997-3

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

469 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (31E FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 1000 barrels per day or 120,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 55.6 lb/day or 8044 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
12. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-998-2

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

700 BBL GAS KNOCKOUT VESSEL (V-100) WITH VAPOR CONTROL SYSTEM CONSISTING OF MISC. VAPOR CONTROL EQUIPMENT AND VENTED TO STEAM GENERATORS S-1128-15 AND '-18 (31E FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Total VOC emissions fugitive rate from tanks S-1128-998 and '999 and vapor control system components associated with these emission units shall not exceed 31.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 70% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate component count for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
13. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1000-2

EXPIRATION DATE: 02/29/2016

SECTION: 2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

1,600 BBL GAS KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
8. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1001-2

EXPIRATION DATE: 02/29/2016

SECTION: 2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

1,600 BBL GAS KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1004-4

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-2010-317) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S HEAVY OIL WESTERN STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare shall not operate within 1000 ft from a receptor (business or residence). [District Rule 4102]
4. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
5. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site when in use. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
6. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
7. Permittee shall inspect the flare in operation for visible emissions at each new location. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The flame shall be present at all times when combustible gases are vented through the flare. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
9. Flare shall be equipped with operational automatic re-ignition provisions. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
10. Daily flared gas heat input, except pilot fuel, shall not exceed 600 MMBtu per day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Annual flared gas heat input, except pilot fuel, shall not exceed 60 billion Btu per year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flared gas sulfur content shall not exceed 75.0 gr S/100 scf or 1,200 ppmv H₂S. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: 0.008 lb-PM₁₀/MMBtu, 0.068 lb-NO_x/MMBtu (as NO₂), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall document compliance with flared gas sulfur content at each new location of operation of the flare by performing H₂S analysis of flared gas using Draeger tube analysis. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. Permittee shall determine sulfur content of gas flared at startup and at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Operator shall determine hhv of gas flared at time of sulfur testing by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content, and daily and annual flared gas heat input rates; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1014-3

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL CRUDE OIL STORAGE TANK (T-33) CONNECTED TO TANK '1-1019 VAPOR CONTROL SYSTEM (31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to the vapor collection system listed on permit S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor control system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1015-6

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

380 BBL WEMCO AIR FLOATION UNIT #M-901 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per calendar year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
4. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
6. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1018-3

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

2000 BBL DRAIN TANK WITH NATURAL GAS BLANKETING (2F OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 2,000 barrels per day or 70,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 103.0 lb/day or 4,588 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
13. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1019-6

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

CYMRIC 31X OIL CLEANING PLANT VAPOR CONTROL SYSTEM SHARED WITH 22 PERMIT UNITS; INCLUDING HEAT EXCHANGER(S), G/L SEPARATORS, GAS COMPRESSORS, & GAS PIPING TO EITHER TEOR PERMIT S-1128-116 COLLECTION SYSTEM, SCRUBBED STEAM GENERATORS S-1128-3, -24, -25, -26, AND -29 THROUGH -34, OR DOGGR APPROVED DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. Vapor control system may be inoperable during maintenance/repairs/upset conditions of tanks S-1128-248, -250, -262, -263, -400, -401, -402, -404, -405, -406, -407, -411, -412, -935, -936, -938, -1014, and -1020 for up to 600 hours per rolling 12-month period. District-approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 from the total number of vapor components associated with tank and vapor control system shall not exceed 112.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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8. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The efficiency of any VOC destruction device shall be measured by USEPA Method 18, 25, 25a, or 25b. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC limit listed above does not include components handling produced fluids with an API gravity less than 30 degrees, or components in water/oil service (condensate) with a water content equal to or greater than 50% by weight, or components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Vapor control equipment compressor shall activate before the pressure relief valve vents on any of the units served by the vapor control equipment when operational. Vapor recovery system may be inoperable during maintenance/repairs/upset conditions for up to 600 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
16. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1020-2

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED-ROOF WASH TANK (T-27) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor recovery system, permit S-1128-1019, except during District approved cleaning and during maintenance procedures. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1129-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rule 4623]
5. Maximum VOC content of vapor in the tank vapor space shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall conduct quarterly gas sampling of gas handled by TVR system. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC content of vapor by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945, D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
8. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3 and 5.6] Federally Enforceable Through Title V Permit
9. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
10. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District NSR Rule and District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
12. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District NSR Rule and District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
14. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
17. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
18. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
21. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
22. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
24. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
26. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
29. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b. [District NSR Rule] Federally Enforceable Through Title V Permit
34. {981} The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
35. Operator shall keep records of VOC content of tank vapors as required under this permit and shall make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
38. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1023-2

EXPIRATION DATE: 02/29/2016

SECTION: NE34 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

25.2 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #60; DIS# 20754-66) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FGR - DERBY ACRES LEASE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or modifications required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform fuel sulfur content certification, tuning, and monitoring requirements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing, fuel sulfur content certification, tuning, and monitoring requirements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with a non-resettable, operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit unit: PTO S-1129-386. [District Rules 2201, 4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
7. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, permittee shall not exceed the following: PM10: 0.010 lb/MMBtu, SOx: 1.768 lb/MMBtu, VOC: 0.003 lb/MMBtu, [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, permittee shall not exceed the following: NOx (as NO2): 0.0365 lb/MMBtu or 30 ppmv @ 3% O2 or CO: 0.0355 lb/MMBtu or 48 ppmv @ 3% O2, except during start-up or shutdown. [District Rules 2201] Federally Enforceable Through Title V Permit
10. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 22.1 lb-NOx/day, 1,095 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.5 lb-CO/day, and 1,065 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 1070]
12. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1024-2

EXPIRATION DATE: 02/29/2016

SECTION: SW18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM5 STA. L

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Host vapor pressure (ROC - C2) of any organic liquid introduced to the tank shall not exceed 0.23 psia. [District Rule 4623, and District NSR Rule] Federally Enforceable Through Title V Permit
3. Daily volume of liquids introduced into tank shall not exceed 16,000 barrels on any given day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual volume of liquids introduced into tank shall not exceed 960,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1025-2

EXPIRATION DATE: 02/29/2016

SECTION: SW18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

1110 BBL GAS/LIQUID SEPARATOR VESSEL V-100 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

PERMIT UNIT REQUIREMENTS

1. Equipment may include a compressor, or a compressor and chiller. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall comply in full with all applicable Rule 4401 requirements. [District Rule 4401] Federally Enforceable Through Title V Permit
3. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above the ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall demonstrate that any components in condensate service handle fluid streams that contain at least 50% water (by weight). If the components are shown to contain greater than 80% water (by weight), then no further demonstration will be required, otherwise annual analysis will be required. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of fugitive leak inspection results. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct gas sampling at McKittrick MCK-DIA-VOC sample point located between the Master Trap Vessel and the first liquid knockout vessel to qualify for exemption from fugitive component counts for components handling fluids with 10% or less VOC by weight. The testing required by permit S-1129-864 shall be used to demonstrate compliance, which is representative of all components downstream of the first liquid knockout vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually). Testing performed for permit S-1129-864 shall be deemed representative of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1026-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

906 BBL GAS/LIQUID SEPARATOR VESSEL V-200 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

PERMIT UNIT REQUIREMENTS

1. Equipment may include a compressor, or a compressor and chiller. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall comply in full with all applicable Rule 4401 requirements. [District Rule 4401] Federally Enforceable Through Title V Permit
3. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above the ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall demonstrate that any components in condensate service handle fluid streams that contain at least 50% water (by weight). If the components are shown to contain greater than 80% water (by weight), then no further demonstration will be required, otherwise annual analysis will be required. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of fugitive leak inspection results. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct gas sampling at McKittrick MCK-DIA-VOC sample point located between the Master Trap Vessel and the first liquid knockout vessel to qualify for exemption from fugitive component counts for components handling fluids with 10% or less VOC by weight. The testing required by permit S-1129-864 shall be used to demonstrate compliance, which is representative of all components downstream of the first liquid knockout vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually). Testing performed for permit S-1129-864 shall be deemed representative of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1027-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

1190 BBL (12.5 FT DIA X 50 FT) HEAVY CRUDE OIL WET LACT SEPARATOR VESSEL AND ASSOCIATED PIPING AND COMPONENTS, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1022

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All gas/light liquid components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, polish rod stuffing boxes and other (pressure relief devices, compressor seals, meters, etc.). [District Rule 2201] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All vapor service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 ft above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Maximum VOC content of vapor in the vessel vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions from components in vapor service shall not exceed 10.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit accurate fugitive component counts of vapor handling equipment and resulting emissions calculated using the average fugitive emissions factors in the USEPA's 1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017, Table 2-4). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall conduct quarterly gas sampling. If gas samples are less than 50% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of the VOC content of vapor in the vessel vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
15. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1028-2

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #1 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O2; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O2 CONCENTRATIONS

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
6. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.4360, 40 CFR 60.4365(a), 40 CFR 60.4370(c)] Federally Enforceable Through Title V Permit
7. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Upon concluding the initial shakedown period, emissions from the gas turbine system, except during periods of startup, shutdown, and black start, shall not exceed any of the following limits: 5 ppmvd NOx @ 15% O2 referenced as NO2; 29 ppmvd CO @ 15% O2; 0.013 lb-PM10/MMBtu; 0.024 lb-VOC/MMBtu referenced as methane; and 0.00233 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
9. Upon concluding the initial shakedown period, emissions from the gas turbine system shall not exceed any of the following limits: 64.1 lb-NOx/day referenced as NO2; 1,658.9 lb-CO/day; 5.8 lb-SOx/day; 32.1 lb-PM10/day; 138.8 lb-VOC/day referenced as methane; and 70.2 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon concluding the initial shakedown period, the emissions from the gas turbine system shall not exceed any of the following limits: 16,615 lb-NO_x/year; 65,810 lb-CO/year; 2,102 lb-SO_x/year; 11,730 lb-PM₁₀/year; 22,052 lb-VOC/year; 25,637 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine systems (S-1129-868, '-869) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 40 CFR 60.4400(a)] Federally Enforceable Through Title V Permit
19. Unit shall demonstrate compliance annually with NO_x and CO emissions limits with the duct burner in operation and not in operation. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60.4400 (1)(i)] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
24. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
25. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.4340(b)(1) and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
26. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit
27. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
28. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1129-868, '-869), and rotate the unit tested so that the two units are tested over two years, 2) annual RAA testing for the one gas turbine engine for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rule 1080] Federally Enforceable Through Title V Permit
30. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4350] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

32. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
35. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 40 CFR 60.4375(a) and 40 CFR 60.4395] Federally Enforceable Through Title V Permit
36. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.4380(b)(2)] Federally Enforceable Through Title V Permit
37. If the gas turbine system is not fired on PUC-regulated or FERC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using ASTM D1072; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit
38. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Except during black start, start-up shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
41. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
44. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

45. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1029-2

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #2 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O₂; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O₂ CONCENTRATIONS

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
6. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.4360, 40 CFR 60.4365(a), 40 CFR 60.4370(c)] Federally Enforceable Through Title V Permit
7. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Upon concluding the initial shakedown period, emissions from the gas turbine system, except during periods of startup, shutdown, and black start, shall not exceed any of the following limits: 5 ppmvd NO_x @ 15% O₂ referenced as NO₂; 29 ppmvd CO @ 15% O₂; 0.013 lb-PM₁₀/MMBtu; 0.024 lb-VOC/MMBtu referenced as methane; and 0.00233 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
9. Upon concluding the initial shakedown period, emissions from the gas turbine system shall not exceed any of the following limits: 64.1 lb-NO_x/day referenced as NO₂; 1,658.9 lb-CO/day; 5.8 lb-SO_x/day; 32.1 lb-PM₁₀/day; 138.8 lb-VOC/day referenced as methane; and 70.2 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon concluding the initial shakedown period, the emissions from the gas turbine system shall not exceed any of the following limits: 16,615 lb-NO_x/year; 65,810 lb-CO/year; 2,102 lb-SO_x/year; 11,730 lb-PM₁₀/year; 22,052 lb-VOC/year; 25,637 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine systems (S-1129-868, '-869) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 40 CFR 60.4400(a)] Federally Enforceable Through Title V Permit
19. Unit shall demonstrate compliance annually with NO_x and CO emissions limits with the duct burner in operation and not in operation. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60.4400 (1)(i)] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. To determine compliance with NO_x emissions, the 3-run source test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. [40 CFR 60.335(b)(2)] Federally Enforceable Through Title V Permit
24. Should the applicant decide to conduct performance evaluation of CEMS with the initial performance test, a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load shall be performed. The test data obtained during these run can be used to demonstrate compliance with the applicable NO_x emission limit and to provide reference method data for the RATA of the CEMS. The requirement to test at three additional load levels is waived under this option. [40 CFR 60.335(b)(6)] Federally Enforceable Through Title V Permit
25. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.4340(b)(1) and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
26. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit
27. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
28. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1129-868, '-869), and rotate the unit tested so that the two units are tested over two years, 2) annual RAA testing for the one gas turbine engine for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rule 1080] Federally Enforceable Through Title V Permit
30. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4350] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

32. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
35. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 40 CFR 60.4375(a) and 40 CFR 60.4395] Federally Enforceable Through Title V Permit
36. Monitor downtime for NO_x shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x concentration or diluent O₂ (or both). [40 CFR 60.4380(b)(2)] Federally Enforceable Through Title V Permit
37. If the gas turbine system is not fired on PUC-regulated or FERC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using ASTM D1072; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit
38. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Except during black start, start-up shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
41. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
44. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

45. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
46. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
47. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-1128-0-4

EXPIRATION DATE: 02/29/2016

FACILITY-WIDE REQUIREMENTS

1. Heavy Oil Western Stationary Source Facility-Wide.
2. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
4. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
5. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
6. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
7. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
8. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

11. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
12. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
13. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
14. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
15. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
16. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
17. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
18. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
22. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
23. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05), by using EPA Method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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24. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
25. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
27. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
28. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
29. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
30. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
31. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
32. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
33. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
34. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
35. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
36. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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37. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
38. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
39. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
44. All permits for facilities S-1128, S-1129, S-1141, S-1549, and S-2592 are included in the Chevron USA Inc. Heavy Oil Western stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
45. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68] Federally Enforceable Through Title V Permit
46. The reporting periods of the Report of Required monitoring and Compliance Certification Report begin November 30 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due on the 30 days after the end of the reporting period. If the due date falls on a day that the SJVAPCD is closed, they will be due on the next business day. [District Rule 2520] Federally Enforceable Through Title V Permit
47. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
48. The following conditions which include category titles are only applicable to those permit units with conditions which reference the specific category title. [District Rule 2080] Federally Enforceable Through Title V Permit
49. Steam Generator Dormant Emissions Unit Condition: While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
50. Steam Generator Dormant Emissions Unit Condition: While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
51. Steam Generator Dormant Emissions Unit Condition: Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

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52. Steam Generator Dormant Emissions Unit Condition: Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
53. Steam Generator Dormant Emissions Unit Condition: Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
54. Steam Generator General Condition: Nitrogen oxide (NO_x) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rule 4301] Federally Enforceable Through Title V Permit
55. Steam Generator General Condition: Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
56. Steam Generator General Condition: Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520 and 4301] Federally Enforceable Through Title V Permit
57. Steam Generator General Condition: Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4306 and 4320] Federally Enforceable Through Title V Permit
58. Steam Generator General Condition: Duration of start-up or shutdown shall not exceed two hours each per occurrence. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
59. Steam Generator General Condition: Permittee shall maintain records of duration of each start-up and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
60. Steam Generator General Condition: Annual tests results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NO_x or CO limits of this permit, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x or CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
61. Steam Generator General Condition: The following conditions must be met for representative unit(s) to be used to test for NO_x or CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 4305, and 4320] Federally Enforceable Through Title V Permit
62. Steam Generator General Condition: All units in a group for which representative units are source for NO_x or CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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63. Steam Generator General Condition: All units in a group for which representative units are source tested for NOx or CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
64. Steam Generator General Condition: The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
65. Steam Generator General Condition: Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
66. Steam Generator General Condition: Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit
67. Steam Generator General Condition: The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
68. Steam Generator General Condition: Flue gas recirculation shall be utilized, as needed, in conjunction with low NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
69. Steam Generator General Condition: If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit
70. Steam Generator General Condition: If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the fuel gas being fired in the steam generator shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, double GC for H2S and mercaptans, or grab sample analysis by double GC performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
71. Steam Generator General Condition: If the steam generator is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 4306, and 4320] Federally Enforceable Through Title V Permit
72. Steam Generator General Condition: Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
73. Steam Generator General Condition: Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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74. Steam Generator General Condition: The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
75. Steam Generator General Condition: The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
76. Steam Generator General Condition: All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
77. Steam Generator Fuel Monitoring Condition: A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the unit shall be utilized and maintained. [40 CFR 60.48(c)(g)] Federally Enforceable Through Title V Permit
78. Steam Generator Fuel Monitoring Condition: When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
79. Steam Generator Fuel Monitoring Condition: When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using test methods specified in "Steam Generator - Source Testing Conditions". Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
80. Steam Generator Fuel Monitoring Condition: If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using "Steam Generator - Source Testing Conditions". [District Rule 2520] Federally Enforceable Through Title V Permit
81. Steam Generator Fuel Monitoring Condition: If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by methods specified in "Steam Generator - Source Testing Conditions". [District Rules 2520, 4305, and 4320] Federally Enforceable Through Title V Permit
82. Steam Generator Fuel Monitoring Condition: Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
83. Steam Generator Fuel Monitoring Condition: Compliance with SO_x emission limits shall be demonstrated by fuel gas sulfur contents analysis at the time of NO_x testing, except for units fired on natural gas purchased from a PUC regulated utility or operated with flue gas scrubber. [District Rule 1081] Federally Enforceable Through Title V Permit
84. Steam Generator Source Testing Condition: All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
85. Steam Generator Source Testing Condition: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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86. Steam Generator Source Testing Condition: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
87. Steam Generator Source Testing Condition: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
88. Steam Generator Source Testing Condition: The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
89. Steam Generator Source Testing Condition: Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
90. Steam Generator Source Testing Condition: Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
91. Steam Generator Source Testing Condition: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
92. Steam Generator Source Testing Condition: Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods or as approved by APCO. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
93. Steam Generator Source Testing Condition: The following test methods shall be used (or other methods as approved by the District): NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; SO_x (lb/MMBtu) - EPA Method 6, 6C, 8 or ARB Method 100; Stack Gas Oxygen - EPA Method 3 or 3A or ARB Method 100; Stack Gas Velocity (ft/min) - EPA Method 2; Stack Gas Volume Flow (cfm) - EPA Method 19; Stack Gas Moisture Content (%) - EPA Method 4; Fuel Gas Sulfur Content - EPA Method 11 or EPA Method 15 or ASTM D6288, D1072, D3031, D4084, D3246, or grab sample analysis by double GC; Fuel Gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588; PM₁₀ (lb/scf) - EPA Methods 5 (front half), 201A, and/or 202, CARB Method 5, or any combination of these PM₁₀ methods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
94. Steam Generator Periodic Monitoring Condition: The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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95. Steam Generator Periodic Monitoring Condition: If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
96. Steam Generator Periodic Monitoring Condition: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
97. Steam Generator Periodic Monitoring Condition: The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
98. Heavy Oil Tank Inspection and Maintenance: Flanges shall be monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
99. Heavy Oil Tank Inspection and Maintenance: All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
100. Heavy Oil Tank Inspection and Maintenance: In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any venting of such devices found by visual, audible, or olfactory detection method. [District Rule 2201] Federally Enforceable Through Title V Permit
101. Heavy Oil Tank Inspection and Maintenance: Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
102. Heavy Oil Tank Inspection and Maintenance: Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit
103. Heavy Oil Tank Inspection and Maintenance: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520] Federally Enforceable Through Title V Permit

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104. Heavy Oil Tank Inspection and Maintenance: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520] Federally Enforceable Through Title V Permit
105. Heavy Oil Tank Inspection and Maintenance: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520] Federally Enforceable Through Title V Permit
106. Heavy Oil Tank Inspection and Maintenance: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
107. Heavy Oil Tank Inspection and Maintenance: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 18 or 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 18 or 25 at least annually. [District Rule 2520] Federally Enforceable Through Title V Permit
108. Heavy Oil Tank Inspection and Maintenance: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520] Federally Enforceable Through Title V Permit
109. Heavy Oil Tank Inspection and Maintenance: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520] Federally Enforceable Through Title V Permit
110. Heavy Oil Tank Inspection and Maintenance: A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
111. Heavy Oil Tank Cleaning Condition: Operator shall notify the District in writing at least 72 hours prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information: (1) The PTO number and physical location of the tank being degassed, (2) The date and time that tank degassing and cleaning activities will begin, (3) The degassing method, as allowed in this permit, to be used, and (4) The method to be used to clean the tank, including any solvents to be used. [District Rule 2080] Federally Enforceable Through Title V Permit
112. Heavy Oil Tank Cleaning Condition: To facilitate connection to an external APCO-approved vapor recovery system a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
113. Heavy Oil Tank Cleaning Condition: During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit
114. Heavy Oil Tank Cleaning Condition: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

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115. Heavy Oil Tank Cleaning Condition: When storing organic liquid of TVP less than 0.5 psia, prior to returning the tank to normal operation, the tank vapor control system shall either be reactivated and the pressure/relief valves closed, or the tank shall be filled to the maximum possible level with water, inert gas, or a liquid with a TVP less than 0.5 psia and the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall then be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
116. Heavy Oil Tank Cleaning Condition: Prior to opening the tank to allow tank cleaning, one of the following degassing procedures must be followed: 1) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; 4) For free-water knockout tanks, the operator may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced; or 5) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained. [District Rule 2080] Federally Enforceable Through Title V Permit
117. Heavy Oil Tank Cleaning Condition: Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
118. Heavy Oil Tank Cleaning Condition: Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
119. Heavy Oil Tank Cleaning Condition: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
120. Heavy Oil Tank Cleaning Condition: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
121. Heavy Oil Tank Cleaning Condition: While performing tank cleaning activities, operators may use the following cleaning agents: clean (produced) water, diesel, solvents with an initial boiling point of greater than 302 °F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
122. Heavy Oil Tank Cleaning Condition: Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
123. Heavy Oil Tank Testing Condition: Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
124. Heavy Oil Tank Testing Condition: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit

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125. Heavy Oil Tank Testing Condition: Operator shall conduct quarterly sampling from the tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
126. Heavy Oil Tank Testing Condition: VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
127. Heavy Oil Tank Testing Condition: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM method D 287-92 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D-4057-95 "Standard Practices for manual Sampling of Petroleum and Petroleum Products". [District Rule 4623] Federally Enforceable Through Title V Permit
128. Heavy Oil Tank Testing Condition: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
129. Heavy Oil Tank Testing Condition: Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
130. Heavy Oil Tank Testing Condition: The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
131. Heavy Oil Tank Testing Condition: The permittee shall keep accurate records of vapor VOC concentration, API gravity, true vapor pressure, storage temperature and types of liquids stored. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
132. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain a current list of all thermally enhanced production wells associated with this operation and accurate records of fugitive inspection component counts of non-exempt components and leak inspection results, and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
133. Thermally Enhanced Oil Recovery Condition: Permittee shall not operate a steam-enhanced crude oil production well unless they comply with one of the following requirements: 1) Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere; or 2) Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
134. Thermally Enhanced Oil Recovery Condition: Fugitive VOC limit listed above does not include components handling produced fluids with an API gravity less than 30 degrees, or components in water/oil service (condensate) with a water content equal to or greater than 50% by weight, or components handling fluid streams with a VOC content of 10% or less by weight. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
135. Thermally Enhanced Oil Recovery Condition: The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 4407] Federally Enforceable Through Title V Permit

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136. Thermally Enhanced Oil Recovery Condition: Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
137. Thermally Enhanced Oil Recovery Condition: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, Section 5 (as amended December 14, 2006). [District Rule 4401] Federally Enforceable Through Title V Permit
138. Thermally Enhanced Oil Recovery Condition: The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401] Federally Enforceable Through Title V Permit
139. Thermally Enhanced Oil Recovery Condition: The operator shall maintain copies of training records and of the latest APCO-approved Operator Management Plan (OMP) at the facility and make such available to the APCO, ARB, and US EPA upon request. [District Rule 4401] Federally Enforceable Through Title V Permit
140. Thermally Enhanced Oil Recovery Condition: By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401] Federally Enforceable Through Title V Permit
141. Thermally Enhanced Oil Recovery Condition: In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
142. Thermally Enhanced Oil Recovery Condition: A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401] Federally Enforceable Through Title V Permit
143. Thermally Enhanced Oil Recovery Condition: A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401] Federally Enforceable Through Title V Permit
144. Thermally Enhanced Oil Recovery Condition: There shall be no components with major liquid leaks or with gas leaks greater than 50,000 ppmv. There shall not be more minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv than the following: 3 leaks for 1 - 25 wells, 6 leaks for 26 - 50 wells, 8 leaks for 51 - 100 wells, 10 leaks for 101 - 250 wells, 15 leaks for 251 - 500 wells, and 1 leak for each 20 wells (with a minimum of 50 wells test) for more than 500 wells connected to a VOC collection and control system. The operator shall be in violation of Rule 4401 if any District inspection, or operator inspection conducted as a requirement of this rule, demonstrates that one or more of the leak standard conditions set forth in section 5.6.2 exists. [District Rule 4401] Federally Enforceable Through Title V Permit
145. Thermally Enhanced Oil Recovery Condition: Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
146. Thermally Enhanced Oil Recovery Condition: Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

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147. Thermally Enhanced Oil Recovery Condition: Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit
148. Thermally Enhanced Oil Recovery Condition: In addition to the inspections required by Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
149. Thermally Enhanced Oil Recovery Condition: In addition to the inspections required by Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
150. Thermally Enhanced Oil Recovery Condition: Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
151. Thermally Enhanced Oil Recovery Condition: Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit
152. Thermally Enhanced Oil Recovery Condition: Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
153. Thermally Enhanced Oil Recovery Condition: Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit
154. Thermally Enhanced Oil Recovery Condition: Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401] Federally Enforceable Through Title V Permit
155. Thermally Enhanced Oil Recovery Condition: The operator shall repair minor gas leaks within 14 days, major gas leaks which less than or equal to 50,000 ppmv within 5 days., major gas leaks which are greater than 50,000 ppmv within two days, minor liquid leaks within 3 days, and major liquid leaks within 2 days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4401] Federally Enforceable Through Title V Permit

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156. Thermally Enhanced Oil Recovery Condition: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401] Federally Enforceable Through Title V Permit
157. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identity and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit
158. Thermally Enhanced Oil Recovery Condition: Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacture's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit
159. Thermally Enhanced Oil Recovery Condition: Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401] Federally Enforceable Through Title V Permit
160. Thermally Enhanced Oil Recovery Condition: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401] Federally Enforceable Through Title V Permit
161. Thermally Enhanced Oil Recovery Condition: VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401] Federally Enforceable Through Title V Permit

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162. Thermally Enhanced Oil Recovery Condition: The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit
163. Thermally Enhanced Oil Recovery Condition: The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. [District Rule 4401] Federally Enforceable Through Title V Permit
164. Thermally Enhanced Oil Recovery Condition: An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system. [District Rule 4401] Federally Enforceable Through Title V Permit
165. Thermally Enhanced Oil Recovery Condition: Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401] Federally Enforceable Through Title V Permit
166. Thermally Enhanced Oil Recovery Condition: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401] Federally Enforceable Through Title V Permit
167. Emergency Standby IC Engine Condition: Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
168. Emergency Standby IC Engine Condition: This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
169. Emergency Standby IC Engine Condition: This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
170. Emergency Standby IC Engine Condition: Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
171. Emergency Standby IC Engine Condition: During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
172. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 2520 and 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
173. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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174. Emergency Standby IC Engine Condition: The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
175. Emergency Standby IC Engine Condition: The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
176. Emergency Standby IC Engine Condition: The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
177. Emergency Standby IC Engine Condition: The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
178. Emergency Standby IC Engine Condition: The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
179. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
180. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-4-35

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #50 DIS# 43009-74 WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 2.46 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,855 lb-NOx/yr, 34.5 lb-CO/day, and 12,593 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.007 lb-SOx/MMBtu, 0.0068 lb-PM10/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, NOx emissions from the steam generator shall not exceed 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 31 ppmvd @ 3% O2 or 0.023 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-5-38

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

69 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #51 DIS# 41752-08 WITH NORTH AMERICAN GLE LOW-NOX BURNER, FGR, BLOWER MOTOR AND VARIABLE SPEED DRIVE APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 0.0076 lb-PM10/MMBtu or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 31.8 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from the steam generator shall not exceed any of the following limits: 27.6 lb-NO_x/day, 7,737 lb-NO_x/yr, or 38.1 lb-CO/day and 13,902 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NO_x and CO. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-6-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-1-26C, DIS# 43011-74) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.037 lb/MMBtu, SOx (as SO2): 0.050 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-11-21

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-2-26C, DIS# 43015-78) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.037 lb/MMBtu, SOx (as SO2): 0.050 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-15-41

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-1-2F (DIS# 43002-81)
WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Low pressure fuel induced recirculation system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: PM10 - 0.050 lb/MMBtu, SOx (as SO2) - 0.324 lb/MMBtu, NOx (as NO2) - 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, VOC - 0.003 lb/MMBtu, or CO: 0.021 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
13. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
14. Upon recommencing operation, if permittee fails any compliance demonstration for NO_x and CO emissions when testing not less than once every 36 months, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
15. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NO_x and CO. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
19. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SO_x is reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-16-31

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-2 DIS # 43003-81 WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Flue gas recirculation system shall be operational at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.006 lb-SOx/MMBtu, 0.007 lb-PM10/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-17-33

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-3 DIS# 43004-81 WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Flue gas recirculation system shall be operational at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed PM10: 0.007 lb/MMBtu, SO_x (as SO₂): 0.006 lb/MMBtu, NO_x (as NO₂): 0.036 lb/MMBtu, VOC: 0.011 lb/MMBtu, and CO: 0.022 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Source testing for NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
8. Source testing for NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
9. If permittee fails any compliance demonstration for NO_x and CO emissions when testing not less than once every 36 months, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. The stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-18-38

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-4-2F WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER - TAFT (GROUP II)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and TEOR gas volume flowmeter. [District Rules 2201, 4305,5.4, and 4306, 5.4] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. If installed, low pressure fuel induced recirculation system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber liquor pH shall be maintained above 6, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR part 64] Federally Enforceable Through Title V Permit
11. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 2520, 9.3.2 and 4801] Federally Enforceable Through Title V Permit
13. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54 lb-NOx/day, 9,855 lb-NOx/yr, 55.5 lb-CO/day, and 20,258 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: SOX (as SO₂): 0.324 lb/MMBtu; PM₁₀: 0.050 lb/MMBtu; or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.1 and 5.2, 4406 and 4801] Federally Enforceable Through Title V Permit
16. Emission rates, except during startup and shutdown, shall not exceed any of the following: NO_x (as NO₂): 0.018 lb/MMBtu or 15 ppmvd @ 3% O₂, or CO: 50 ppmvd @ 3% O₂. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
20. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SO_x is reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-19-32

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#50-5 DIS #43006-81) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.006 lb-SO_x/MMBtu, 0.007 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-21-43

EXPIRATION DATE: 02/29/2016

SECTION: SE36 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 90, DIS# 43010-80) WITH NORTH AMERICAN GLE LOW-NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 36 (SE), T32S, 23E; Section 01 (NE,NW,SE,SW quarters), T30S, R21E; and Section 36 (SW quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NO_x/day, 7,737 lb-NO_x/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-25-47

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 62, DIS# 41764-06) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Permittee shall maintain 0.5 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This generator is approved to operate at the following locations: Sec. 31, T29S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 29 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit
12. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NO_x testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-26-43

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 63, DIS# 43003-79) WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. On or after June 1, 2007, this equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. Steam generator may be operated with North American perforated or solid "S" diffuser plates, four variations of North American solid "S" diffuser plate, or three types of North American Company prototype diffuser plates. After changing burner diffuser plate, stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured by a District approved portable analyzer. Changes in burner diffuser plates and subsequent emission measurements shall be recorded in a contemporaneous log. [District Rule 2520 section 6.4.2] Federally Enforceable Through Title V Permit
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

7. Upon recommencing operation, permittee shall maintain 0.5 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This generator is approved to operate at the following locations: Sec. 31, T29S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, emission rates shall not exceed PM10: 0.038 lb/MMBtu, SO_x (as SO₂): 0.324 lb/MMBtu, NO_x (as NO₂): 0.036 lb/MMBtu or 30 ppmv @ 3% O₂, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu or 29 ppmv @ 3% O₂. [District Rules 4305 and 2201] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers in any calendar month in which the unit operates. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
11. If the NO_x or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall notify the District and take corrective action as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
13. Upon recommencing operation, source testing for NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
14. Upon recommencing operation, if permittee fails any compliance demonstration for NO_x and CO emissions when testing not less than once every 36 months, source testing for NO_x and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
15. The following conditions must be met for representative units to be used to test for NO_x and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. When incinerating vapor recovery gas, testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Upon recommencing operation, the permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-27-33

EXPIRATION DATE: 02/29/2016

SECTION: 07 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #53 DIS# 43010-78 WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.3 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Approved locations for this equipment: Sec. 7, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; SE/4 of Sec. 35, T29S/21E; and SE/4 of Sec. 8, T30S/R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 2.46 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.007 lb-SO_x/MMBtu, 0.0068 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 31 ppmvd @ 3% O₂ or 0.023 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 34.5 lb-CO/day, and 12,593 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-28-34

EXPIRATION DATE: 02/29/2016

SECTION: 07 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL/TEOR GAS-FIRED STEAM GENERATOR #52 DIS# 43014-78 WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.3 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This generator is approved to operate at the following locations: Section 7, T30S, R22E; SW/4 of Section 36, T29S, R21E; NE/4, NW/4, SE/4, and SW/4 of Section 1, T30S, R21E; SE/4 of Section 35, T29S, R21E; SW/4 and SE/4 of Section 6, T30S, R22E; SW/4 of Section 31, T29S, R22E; SE/4 and SW/4 of Section 8, T30S, R22E; and all of Sections 19 and 20, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

8. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0068 lb-PM₁₀/MMBtu, or 0.011 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 21.2 lb-NO_x/day, 7,737 lb-NO_x/yr, 54.9 lb-CO/day, and 13,902 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Operator shall provide an annual fuel analysis to the District. [District Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-29-45

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 55, DIS# 41752-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, SHARED SO₂ SCRUBBER WITH S-1128-30, -31, -32, -33, AND -34 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lbs-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall maintain daily and annual records of all start-up and shutdown occurrences and durations. [District Rule 2201 and Rules 4305, 4306, and 2520, 9.4.2]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Operation shall include one gas/liquid knockout vessel. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 from the total number of vapor components associated with gas/liquid separator shall not exceed 1.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. VOC content of hydrocarbons in gas processed by gas/liquid separator shall not exceed 30%. [District Rule 2201] Federally Enforceable Through Title V Permit
12. VOC content of hydrocarbons in TEOR gas processed by gas/liquid separator shall be measured upon startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit
14. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
15. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
23. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, -128, -130, -144, -385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
28. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. Records of VOC content of the hydrocarbons in the TEOR gas processed by gas/liquid separator shall be kept at the facility and made readily available for compliance inspection upon request for a period of 5 years. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-30-45

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 56, DIS # 41753-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
10. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
19. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
24. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-31-43

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 57, DIS# 41763-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
7. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
18. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of fuels hhv and cumulative annual fuels use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, ` -30, ` -31, ` -32, ` -33, and ` -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-32-45

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 58, DIS# 41751-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 & 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rules 4305, 4306, and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and Rule 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248, and/or partially desulfurized gas discharged from sulfur removal plant S-1128-116; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a) (1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
24. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-33-50

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 59, DIS# 41758-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District 220, 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 4305, 4306, and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, `30, `31, `32, `33, and `34 shall not exceed 292,000 lb per year. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a)(1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
24. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
25. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
27. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-34-48

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 60, DIS# 41759-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO₂ SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Shutdown is the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 83 ppmvd NO_x @ 3% O₂ or 0.1 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 115 ppmvd CO @ 3% O₂ or 0.084 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District 220, 4305 and 4306] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb-NO_x/MMBtu, 0.324 lb-SO_x/MMBtu, 0.038 lb-PM₁₀/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed either of the following limits: 54.0 lbs-NO_x/day or 31.5 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During operation of the SO_x scrubber, sulfur compound emissions shall be controlled by at least 95% by weight or stack SO₂ shall not exceed 9 ppmvd corrected to 3.0% O₂. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 4305, 4306, and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. SO₂ scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when H₂S loading exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H₂S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H₂S concentration. The H₂S loading shall be calculated using the generator actual fuel volumetric flow rate and H₂S concentration of the TEOR and fuel gas. [District Rule 2201 and 4101] Federally Enforceable Through Title V Permit
10. Operator shall maintain an accurate operational log for the Brinks mist eliminator including date, time, duration, the reason the mist eliminator was bypassed, and the sulfur loading. [District Rule 1070] Federally Enforceable Through Title V Permit
11. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed annually using EPA Method 6; or EPA Method 8; or ARB Method 1-100; or other District-approved methods; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520] Federally Enforceable Through Title V Permit
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Permittee shall maintain 0.39 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Exhaust from this steam generator shall be directed to the SO_x scrubber authorized herein, except when the steam generator is combusting natural gas with a sulfur content less than or equal to 5.0 gr-S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall keep daily records of the amounts of natural gas and secondary fuel gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Total SO₂ emissions discharged to the atmosphere from permit units S-1128-29, -30, -31, -32, -33, and -34 shall not exceed 292,000 lb per year. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The steam generators may be fired on natural gas; natural gas and secondary fuel recovered from thermally enhanced oil recovery operations S-1128-116, '-128, '-130, '-144, '-385, tank battery vapor control system S-1128-248; or any combination thereof. The use of different combinations of approved fuels or switching of approved fuels shall not be considered a physical change or change in operation, where the use of fuel is authorized by permit issued under regulations approved in accordance with 40 CFR 51.165 or by a permit issued under 40 CFR 52.21. [40 CFR 51.165(a)(1)(v)(C)(5)(ii), 40 CFR 51.166 (b)(2)(iii)(e)(2), 40 CFR 52.21 (b)(2)(iii)(e)(2)] Federally Enforceable Through Title V Permit
24. Permittee shall record the weekly volume of natural gas and the weekly volume of secondary fuel burned in each steam generator S-1128-29 through S-1128-34. Records of these weekly amounts of the fuels burned shall be maintained for a period of at least five years and shall be readily available upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
25. Each week the permittee shall determine the total SO₂ emitted from S-1128-29 through S-1128-34 utilizing the SO₂ and oxygen (O₂) concentrations in the exhaust stack gas using handheld or transportable gas analyzers. The analyzers shall be calibrated, operated, and maintained as specified by the District Rule 1081. Mass emissions of SO₂ shall be calculated using measured exhaust stack gas concentrations of SO₂ and O₂, and the measured fuel rates (primary fuel + secondary fuel) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 2520] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of the weekly, monthly, and annual SO₂ emissions for S-1128-29 through S-1128-34 for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
27. Each steam generator SO₂ emissions shall be apportioned from the total SO₂ emissions by proportioning the amount of sulfur in the fuels, both primary and secondary, burned in each steam generator to the total primary and secondary fuels burned in all six steam generators. [District Rule 2520] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records documenting steam generator emissions of SO₂ for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 2520] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of the exhaust gas scrubber and Brinks mist eliminator dates and times of startup and shutdown, and any corrective actions undertaken to improve performance for a period of at least 5 years and shall make such records readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-35-39

EXPIRATION DATE: 02/29/2016

SECTION: SW36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 89) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 47 ppmvd @ 3% O₂ or 0.035 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 52.5 lb-CO/day, and 19,163 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-36-31

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND WITH SO₂ SCRUBBER WITH FGR (CUSA ID #50-3-26C)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. SO_x emissions shall be reduced by 95% or to 9 ppmvd SO_x @ 3% O₂. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber liquor pH shall be maintained between 6 and 8 and shall be continuously monitored and recorded during operation of this unit. [District Rules 2201 and 2520, 9.4.1] Federally Enforceable Through Title V Permit
7. Scrubber mist eliminator shall be properly cleaned and maintained per the recommendations of the manufacturer. Each occurrence of the cleaning and maintenance shall be recorded. [District Rules 2201 and 2520, 9.4.1] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. The scrubber recirculation liquor liquid to gas ratio shall be recorded on a weekly basis. [District Rules 2201 and 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. Emissions from the steam generator shall not exceed any of the following limits: 0.13 lb-SO_x/MMBtu, 0.037 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4201, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
10. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, 4320, and 4405] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. A source test to demonstrate compliance with SO_x emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. Permittee shall retain on site an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6]
16. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the scrubber liquor pH, occurrences of the cleaning and maintenance of the scrubber mist eliminator, and the scrubber liquid-to-gas ratio shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-38-35

EXPIRATION DATE: 02/29/2016

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (#94)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The sulfur content of fuel combusted shall not exceed 5 grains-S per 100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
5. This equipment is approved to be operated at the following locations: Sec. 25, T31S/R22E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only PUC-quality natural gas or a combination of natural gas and vapor recovery gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The combined PM10 emission rate for steam generators S-1128-38 and -158 shall not exceed 21.0 lb/day whenever steam generator S-1128-38 is at any of the following locations: Sec. 26, T32S/R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of fuel type, quantity, and results of monthly vapor recovery gas sulfur analyses, and such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of the dates, locations, and daily fuel consumption for steam generators S-1128-38 and -158, and such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Emissions from the steam generator shall not exceed any of the following limits: 0.0143 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
13. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
16. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NO_x testing, except for natural gas purchased from a PUC regulated utility. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
17. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain daily records of volume of fuel gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-48-35

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-4-26C) EQUIPPED WITH A NORTH AMERICAN MAGNAFLAME GLE ULTRA-LOW NOX BURNER WITH SO2 SCRUBBER WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
6. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Emissions from the steam generator shall not exceed any of the following limits: 0.324 lb-SO_x/MMBtu, 0.037 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.018 lb/MMBtu, 29 ppmvd CO @ 3% O₂ or 0.021 lb/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
13. The permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, and the date and duration of scrubber operation, for a period of five years, and shall make records available for inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
15. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
16. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
17. SO_x emissions shall be reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-56-21

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-5-26C, DIS# 43303-80) WITH SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed PM10: 0.036 lb/MMBtu, SOx (as SO2): 0.070 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu @3% O2, VOC: 0.003 lb/MMBtu, and CO: 0.021 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6 and 8, and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquor liquid to gas ratio shall be maintained at no less than 8.0 gpm/1000 acfm. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Testing for vapor recovery gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-57-23

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 LOW NOX BURNER WITH FGR (#50-6 DIS #43012-81)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
4. Whenever the unit is switched to scrubbed operation, compliance source testing for SO_x shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.087 lb-SO_x/MMBtu, 0.045 lb-PM₁₀/MMBtu, or 0.013 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 51 ppmvd CO @ 3% O₂ or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4351, 5.1] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of natural gas burned and vapor recovery system gas incinerated. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fuel gas sulfur content shall not exceed 5 gr-S/100 dscf unless SO_x is reduced by 95% or to 9 ppmvd SO_x @ 3% O₂ in exhaust with scrubber. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-58-25

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-7 DIS# 43013-81 WITH FGR AND NORTH AMERICAN GLE ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Section 26, T32S/R23E; Section 1, T30S/R21E; Section 36, T29S/R21E; NW/4 & SW/4 of Section 7, T30S/R22E; NE/4, NW/4, and SE/4 of Section 34, T30S/R22E; and SE/4 of Section 8, T30S/R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and vapor recovery gas volume flowmeter, or a volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305,5.4, and 4306, 5.4] Federally Enforceable Through Title V Permit
5. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
6. Fuel gas sulfur content shall not exceed 5 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Permittee shall determine sulfur content of combusted gas annually. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 0.045 lb/MMBtu; or VOC: 0.013 lb/MMBtu. [District Rules 2201, 4201, 3.1, 4301, 5.2, 4406 and 4801] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmvd @ 3% O2, or CO: 0.025 lb/MMBtu or 33.8 ppmvd @ 3% O2. [District Rules 2201, 2520, 9.3.2, 4201, 3.1, 4301, 5.2, 5.3, and 5.5, 4305 and 4306] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
11. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54 lb-NOx/day, 9,855 lb-NOx/yr, 37.5 lb-CO/day, and 13,688 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [Kern County Rule 407; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit
14. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
17. The permittee shall keep daily records of the amount of natural gas and vapor recovery gas combusted, permit number(s) of vapor recovery systems providing gas for incineration, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-66-31

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 82, DIS# 26753-80) WITH FGR, VARIABLE FREQUENCY DRIVE FOR BLOWER MOTOR, AND O2 ANALYZER FOR FGR CONTROL

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 47 ppmvd @ 3% O₂ or 0.035 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 52.5 lb-CO/day, and 19,163 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-68-23

EXPIRATION DATE: 02/29/2016

SECTION: 01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 76, DIS# 43016-82) NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR, VARIABLE FREQUENCY DRIVE, AND O2 CONTROLLER - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-75-26

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 91, DIS# 43001-85) WITH NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: Section 1, T30S, R21E; SW 1/4 of Section 36, T29S, R21E; and SW 1/4 Section 6Z, T30S, R22E. [District Rule 2201 and District Rule 4102] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-76-27

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

69 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 93, DIS# 41751-09) WITH A NORTH AMERICAN GLE MAGNA-FLAME LOW-NOX BURNER, FGR, VARIABLE FREQUENCY DRIVE, AND O2 ANALYZER APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: NE 1/4 Section 26 and NW 1/4 Section 25, T32S, R23E; all of Section 1, R30S, T21E; NW 1/4 Section 7, R30S, T22E; Section 36, T31S, R23E; SW 1/4 Section 6, R30S, T22E; and all of Section 19 and 20, R30S, T22E. [District Rule 2201 and District Rule 4102] Federally Enforceable Through Title V Permit
3. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 29 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 21.2 lb-NOx/day, 7,737 lb-NOx/yr, or 34.8 lb-CO/day and 12,693 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-77-25

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 92, DIS# 43003-85) WITH A NORTH AMERICAN MODEL MAGNA FLAME GLE-4231 LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Approved locations for this equipment: NE 1/4 Section 26 and NW 1/4 Section 25, T32S, R23E; SE 1/4 Section 1, R30S, T21E; NW 1/4 Section 7, R30S, T22E; Section 36, T31S, R23E; and SW 1/4 Section 6Z, T30S, R22E. [District Rule 4102]
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-79-21

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #95 (DIS#43007-85) EQUIPPED WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S/R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S/R21E; SW/4 of Sec. 36, T29S/R21E; and the SE/4 of Sec. 35, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 28 ppmvd @ 3% O₂ or 0.020 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 30.5 lb-CO/day, and 11,114 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-80-23

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 96) WITH FGR - APPROVED FOR VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S, R23E; NE/4, NW/4, SE/4, SW/4 of Sec. 1, T30S, R21E; SE/4 and SW/4 of Sec. 36, T29S, R21E; and the SE/4 of Sec. 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-111-23

EXPIRATION DATE: 02/29/2016

SECTION: 06 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 72) WITH A NORTH AMERICAN MODEL #4231 G-LE MAGNA FLAME LOW-NOX BURNER WITH VARIABLE FREQUENCY DRIVE FOR THE BLOWER MOTOR, FGR, AN O2 ANALYZER FOR FGR CONTROL, AND APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This generator is approved to operate at the following locations: Sec. 6, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-112-26

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR (CUSA ID# 73) APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This generator is approved to operate at the following locations: Sec. 6, T30S/R22E; SW/4 of Sec. 36, T29S/R21E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S/R21E; and SE/4 of Sec. 35, T29S/21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320]
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rules 2520, 9.3.2 and 4320]
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201]
8. Except during start-up and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 29 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
9. During start-up and shutdown periods emissions from the steam generator shall not exceed 0.084 lb-CO/MMBtu. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 21.2 lb-NOx/day, 7,737 lb-NOx/yr, 52.2 lb-CO/day, and 12,693 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320]
11. Operator shall provide an annual fuel analysis to the District. [District Rule 4320]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-113-24

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 97) WITH A NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR - APPROVED FOR VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 26, T32S, R23E; NE/4, NW/4, SE/4, and SW/4 of Sec. 1, T30S, R21E; SE/4 and SW/4 of Sec. 36, T29S, R21E; and the SE/4 of Sec. 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.005 lb-PM₁₀/MMBtu, or 0.007 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-116-68

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-36W #1 SERVING 146 STEAM ENHANCED WELLS INCLUDING SIX AUTOMATIC WELL TEST STATIONS AND GAS PIPING TO SCRUBBED STEAM GENERATORS, SEPARATOR VESSEL FV-3A, DOGGR APPROVED DISPOSAL WELL(S), AND 460 MMBTU/HR JOHN ZINK MODEL #EEF-LHLS-24 AIR ASSISTED EMERGENCY FLARE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The air-assisted John Zink flare shall not discharge air contaminants into the atmosphere which exceeds 5% opacity or Ringelmann 1/4 for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The operation includes heat exchanger(s), gas/liquid separator(s), condensate tank(s), compressor(s), gas volume flow rate and temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The system includes gas piping from vapor control systems 36W #1 TEOR S-1128-116, 31X TEOR S-1128-128, 36W #2 TEOR S-1128-130, 5Z/6Z TEOR S-1128-144, 31X tank battery S-1128-248, Mckittrick Diatomite TEOR S-1129-864, and 1Y TEOR S-1128-385, and TEOR flow back vapor collection from Tulare formation wells (previously used for disposal). [District Rule 2201] Federally Enforceable Through Title V Permit
5. John Zink flare field sour gas line shall be equipped with an operational flow meter. John Zink flare pilot gas line shall be equipped with an operational flow meter and pilot fuel flow rate shall not exceed 20,000 scf/day of natural gas or 5,580 scf/day (153.8 gal/day) of liquid petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
6. Only PUC quality natural gas or liquified petroleum gas (LPG) shall be used as pilot gas in the flare. [District Rule 2020] Federally Enforceable Through Title V Permit
7. When operated, the flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Operation of flares for other than maintenance and testing shall be limited to unforeseen electrical power outages or emergencies (as defined below) that results in the inability to dispose of the vapors in devices approved for that purpose. Emergency is defined as an unforeseeable failure or malfunction of operating equipment that 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; 4) does not constitute a nuisance; and 5) results in the use of equipment exempted from offsets by Rule 2201 to prevent or ameliorate an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. The owner or operator shall notify the District of any emergency use of the flare within twenty four hours after confirmation that an actual flaring event has occurred. In the event that confirmation of an actual flaring event cannot be made, then the owner or operator shall notify the District no more than 24 hours after an alarm indicates that a flaring event may have occurred. [District Rule 1070 and 4311] Federally Enforceable Through Title V Permit
10. Operation of the flare shall not exceed 200 hours per year for purposes of flare maintenance and testing. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The air-assisted John Zink flare, for purposes of flare maintenance and testing, emissions rates shall not exceed any of the following: 0.068 lb NO_x/MMBtu (672 lb NO_x/year), 20,000 lb SO_x/year, 0.708 lb PM₁₀/MMBtu (3894 lb PM₁₀/year), 0.063 lb VOC/MMBtu (622 lb VOC/year) and 0.37 lb CO/MMBtu (3656 lb CO/year). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Sulfur compound combustion emissions shall not exceed 2000 ppmv as SO₂. [District Rule 4801] Federally Enforceable Through Title V Permit
13. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
14. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
15. The emergency flare shall be equipped with a functional continuous flame detection device to detect at least one pilot flame or to detect the presence of flare flame. [District Rule 4311] Federally Enforceable Through Title V Permit
16. Fugitive VOC emission rate from fugitive component counts of the TEOR vapor control system, calculated using U.S. EPA publication 453/R-95-017, Table 2-4, based on 50% VOC by weight of Total Organic Content (TOC), shall not exceed 268.3 lb/day. [District Rule 2210] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
18. If operator determines that the flow back system does not operate successfully, then the flow back system may be idled and/or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Existing Tulare injection wells are authorized to operate as either flow back wells or injection wells until such a time as the DOGGR injection permit for the existing Tulare injection wells is terminated. Upon termination of the Tulare injection well permit by DOGGR, the existing Tulare injection wells will continue to operate as flow back wells only or be idled and/or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
21. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
22. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
23. Emission rate from natural gas pilot gas shall not exceed any of the following: NO_x (as NO₂) - 0.1 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM₁₀ - 0.0076 lb/MMBtu, CO - 0.084 lb/MMBtu, or VOC - 0.0055 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
24. Emission rate from propane pilot gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM₁₀ - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. Permittee shall measure and maintain a daily record of flare pilot (LPG and natural gas) gas volumes, John Zink flare field sour gas volume, and shall maintain an annual record of the number of hours of operation of each flare. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s), and shall make such listings readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
27. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-118-25

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 628 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
4. Except for when casing vents or downstream valves are closed; noncondensable gas shall be piped to one or more of the following steam generators for incineration: S-1128-36; S-1128-48 or to tanks equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Casing vapor collection system shall be equipped with vapor flow rate indicator/recorder downstream of condensible recovery system measuring total flow rate. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Water/VOC condensate from all vapor recovery systems shall be pumped to condensate collection tank or field gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Vapors shall not be vented to the atmosphere if VOC combustion source is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum fugitive VOC emission rate from the well head casing vent vapor collection system shall not exceed 1,508.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Noncondensable sulfur compounds content shall not exceed 2,000 ppmv unless steam generators incinerating vapors are connected to flue gas scrubber if required to maintain compliance with sulfur emission limit. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain daily records of uncondensed casing vapor flow rate and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permit holder shall maintain updated well roster readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available to the APCO, California Air Resources Board (ARB), and EPA upon request. [District Rules 1070, 2520 and 4401] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-125-25

EXPIRATION DATE: 02/29/2016

SECTION: 02 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 253 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND VAPOR PIPING TO STEAM GENERATORS S-1128-15, S-1128-18, AND VAPOR PIPING TIED INTO VAPOR RECOVERY LINE FROM SYSTEM LISTED UNDER PERMIT S-1128-617

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in gas processed shall not exceed 37% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permit holder shall maintain updated well roster readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Water/VOC condensate from all vapor recovery systems shall be pumped to condensate collection tank or field gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Vapors shall not be vented to the atmosphere if VOC combustion source is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum fugitive VOC emission rate from the well head casing vent vapor collection system shall not exceed 46.6 lb/day, as calculated according to District Policy SSP 2015 Procedures for Quantifying Fugitive VOC Emissions At Petroleum and SOCMF Facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate fugitive component counts for well vent vapor control systems and resulting emissions calculated using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c(Feb 1999) Screening Range emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except for when casing vents or downstream valves are closed; noncondensable gas shall be piped to one or more of the following steam generators for incineration: S-1128-15; S-1128-18 or to tanks equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-128-23

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-31X SERVING 60 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S), VAPOR COMPRESSOR(S), AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operation includes piping from pipeline vent pots 4, 5, and 6, heat exchanger(s), gas/liquid separator(s), gas/liquid separator S-1128-950, vapor compressor(s), and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 165.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a copy of DOGGR approval for each disposal well used for Rule 4401 compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
8. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520 and 4401] Federally Enforceable Through Title V Permit
9. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-130-22

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WVC SYSTEM CC-36W #2 SERVING 146 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S, DOGGR APPROVED DISPOSAL WELL(S), OR 5 AUTOMATIC WELL TEST VESSELS - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operation includes piping from pipeline vent pots 2 and 3 to casing gas collection line, vapor piping from 5 automatic well test vessels (AWTs) in Sec 36, T29S, R21E (2 at GS#2, 1 at GS#3 and 2 at GS#4), diverter valve piping from TEOR #CC-1Y (S-1128-385) discharge line (tying S-1128-385 to S-1128-130), heat exchanger(s), gas/liquid separator(s), vapor compressor(s), gas volume flow rate and temperature indicators, and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC content of hydrocarbons in gas processed shall not exceed 28% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions from components in vapor and condensate service shall not exceed 297.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using the EPA "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), Oil and Gas Production Operations Average Emission Factors, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520] Federally Enforceable Through Title V Permit
9. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401] Federally Enforceable Through Title V Permit
10. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-144-17

EXPIRATION DATE: 02/29/2016

SECTION: 05 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-5Z/6Z SERVING 33 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S) - CYMRIC

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit
5. The operation includes heat exchanger(s), gas/liquid separator(s), vapor compressor(s), and gas piping to either TEOR permit S-1128-116 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emissions shall not exceed 103.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520] Federally Enforceable Through Title V Permit
8. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520 and 4401] Federally Enforceable Through Title V Permit
9. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-154-32

EXPIRATION DATE: 02/29/2016

SECTION: 08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL/PRODUCED GAS FIRED STEAM GENERATOR (CUSA ID #14) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.07 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The sulfur content of fuel combusted shall not exceed 1.16 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with fuel gas (natural gas) and supplemental gas (produced gas) volumetric flow rate indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall measure and record the volume of fuel gas (natural gas) and supplemental gas (produced gas) burned in the steam generator on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall measure and record fuel gas (natural gas) and supplemental gas (produced gas) sulfur contents at least once per month. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 0.0033 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
10. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
11. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-159-24

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (CUSA ID# 18-A)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This equipment is approved to be operated at the following locations: Sec. 18, T30S, R22E and SE/4 of Sec. 8, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.014 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-160-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 16 STEAM DRIVE WELLS AND 18 CYCLIC WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-161-11

EXPIRATION DATE: 02/29/2016

SECTION: 08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 65 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. Final vapor condenser shall utilize exhaust gas temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Condensate collection vessel shall be equipped with high efficiency mist eliminator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Mist eliminator shall be maintained in optimum operating condition. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Condensate shall be disposed of in manner preventing VOC emissions to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC emission rate shall not exceed 214.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-162-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 40 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
5. The operation shall be equipped with 2 heat exchangers, 1gas liquid separator, 1 vapor compressor, and compressed vapor piping to authorized disposal/incineration devices. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-248-46

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL TANK T-24 VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-250-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF STORAGE TANK (T-41) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-262-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-35) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-263-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-36) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-305-6

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-306-7

EXPIRATION DATE: 02/29/2016

SECTION: NE01 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

600 BHP CUMMINS MODEL KTA1965T DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-307-6

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-366-21

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 26C CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 1,307 lb-SO_x/year; 8,495 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-367-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 26C CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 1,307 lb-SO_x/year; 8,495 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-368-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 26C CG-3) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 1,307 lb-SOx/year; 8,495 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-369-20

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 26C CG-4) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.013 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.002 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1,164.1 lb-CO/day; 3.6 lb-SO_x/day; 23.3 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 1,307 lb-SOx/year; 8,495 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-366, -367, -368 or -369) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-366, -367, -368, or -369), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-370-23

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.031 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1164.1 lb-CO/day; 82.4 lb-SO_x/day; 55.5 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 30,061 lb-SOx/year; 20,258 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
35. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
41. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
42. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-371-23

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H₂S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.031 lb-PM₁₀/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NO_x/day referenced as NO₂; 1164.1 lb-CO/day; 82.4 lb-SO_x/day; 55.5 lb-PM₁₀/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NOx/year; 69,019 lb-CO/year; 30,061 lb-SOx/year; 20,258 lb-PM10/year; 17,901 lb-VOC/year; 18,567 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NO_x shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x concentration or diluent O₂ (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
35. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
41. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
42. The owner or operator shall submit to the District information correlating the NO_x control system operating parameters to the associated measured NO_x output. The information must be sufficient to allow the District to determine compliance with the NO_x emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-372-22

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-3) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NOx @ 15% O2 referenced as NO2; 44 ppmvd CO @ 15% O2 when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O2 when firing gas turbine only; 0.031 lb-PM10/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NOx/day referenced as NO2; 1164.1 lb-CO/day; 82.4 lb-SOx/day; 55.5 lb-PM10/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 30,061 lb-SO_x/year; 20,258 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
35. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
41. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
42. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-373-22

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 36W CG-4) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR DUCT BURNER (NOMINAL RATING) WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. If the gas turbine system is fired on-PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
3. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on non-PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
5. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
6. Operation shall include non-condensable gas inlet piping from District approved TEOR or tank vapor system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system, when startup or shutdown or black start do not occur, shall not exceed any of the following limits: 9 ppmvd NOx @ 15% O2 referenced as NO2; 44 ppmvd CO @ 15% O2 when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O2 when firing gas turbine only; 0.031 lb-PM10/MMBtu; 0.027 lb-VOC/MMBtu referenced as methane; and 0.046 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 65.6 lb-NOx/day referenced as NO2; 1164.1 lb-CO/day; 82.4 lb-SOx/day; 55.5 lb-PM10/day; 99.6 lb-VOC/day referenced as methane; and 50.9 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 21,566 lb-NO_x/year; 69,019 lb-CO/year; 30,061 lb-SO_x/year; 20,258 lb-PM₁₀/year; 17,901 lb-VOC/year; 18,567 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-370, -371, -372 or -373) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1128-370, -371, -372, or -373), and rotate the unit tested so that all four units are tested over four years, 2) annual RAA testing for the three gas turbine engines for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
35. Except during black start, each startup shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Each shutdown shall not exceed two hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
41. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
42. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-374-16

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 31X CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-374 or -375) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-374 and S-1128-375 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-374 or S-1128-375), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. NOx emissions shall not exceed 42 ppmvd @ 15% O2 (1-hour average), excluding startup (black start), shutdown and reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2)] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-375-16

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 31X CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NO_x/year; 73,595 lb-CO/year; 2,047 lb-SO_x/year; 8,189 lb-PM₁₀/year; 17,999 lb-VOC/year; 19,339 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-374 or -375) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-374 and S-1128-375 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-374 or S-1128-375), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. NOx emissions shall not exceed 42 ppmvd @ 15% O2 (1-hour average), excluding startup (black start), shutdown and reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2)] Federally Enforceable Through Title V Permit
46. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
49. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-376-15

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NOx/year; 73,595 lb-CO/year; 2,047 lb-SOx/year; 8,189 lb-PM10/year; 17,999 lb-VOC/year; 19,339 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-376 or -377) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-376 and S-1128-377 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-376 or S-1128-377), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-377-15

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The gas turbine system (i.e. gas turbine and duct burner) shall be fired exclusively on PUC-regulated gas or PUC-quality natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) and District Rule 4801] Federally Enforceable Through Title V Permit
3. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b), District Rule 4703] Federally Enforceable Through Title V Permit
7. Emissions from the gas turbine system shall not exceed any of the following limits: 9 ppmvd NO_x @ 15% O₂ referenced as NO₂; 44 ppmvd CO @ 15% O₂ when firing both gas turbine and duct burner simultaneously; 86 ppmvd CO @ 15% O₂ when firing gas turbine only; 0.012 lb-PM₁₀/MMBtu; 0.026 lb-VOC/MMBtu referenced as methane; and 0.003 lb-SO_x/MMBtu referenced as SO₂. NO_x and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NO_x and CO during that clock hour. [40 CFR 60.332(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Emissions from the gas turbine system, on days when startup, shutdown, or black start occurs, shall not exceed any of the following limits: 67.8 lb-NO_x/day referenced as NO₂; 1,174.3 lb-CO/day; 5.6 lb-SO_x/day; 22.4 lb-PM₁₀/day; 99.8 lb-VOC/day referenced as methane; and 53.1 lb-NH₃/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Emissions from the gas turbine system shall not exceed any of the following limits: 22,516 lb-NOx/year; 73,595 lb-CO/year; 2,047 lb-SOx/year; 8,189 lb-PM10/year; 17,999 lb-VOC/year; 19,339 lb-NH3/year. All annual emission limits are based on 12 consecutive month rolling emissions total. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed 21 ppmvd @ 15% O2 over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure start-up mass emission rates of NOx, CO, and VOC shall be conducted for one of the gas turbine engines (S-1128-376 or -377) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) during normal operation shall be conducted annually. [District Rules 2201 and 4703, CFR 60.335(a)] Federally Enforceable Through Title V Permit
18. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O2) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.335(a), and 40 CFR 60.335(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Source test to demonstrate compliance with NO_x and CO emission limits shall be conducted with duct burner "on" and "off" configurations. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rule 2201 and 4703] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
23. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
24. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), District approved protocol for startups, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
25. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ concentrations from the gas turbine systems operating under permits S-1128-376 and S-1128-377 shall be monitored by a common CEMS. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: (1) perform annual RATA testing on at least one unit (S-1128-376 or S-1128-377), and rotate the unit tested so that each unit is tested over two years; (2) perform annual RAA testing for the unit for which the annual RATA is not performed, (3) if a unit fails RAA testing, RATA test must be conducted within 60 days on the failed unit, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed on each unit. [District Rules 1080 and 4703, 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(3)] Federally Enforceable Through Title V Permit
29. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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30. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system, or a District approved alternative polling method, and shall make CEMS data available to the District on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
32. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)(5)] Federally Enforceable Through Title V Permit
33. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.334(j)1)(iii)(B)] Federally Enforceable Through Title V Permit
34. If the gas turbine system is not fired on PUC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using EPA Method 11 or 15; ASTM D1072; D3031; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans; or grab sample analysis by GC-FPD/TCD performed in the laboratory. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
35. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
36. Except during black start, each startup shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. Each shutdown shall not exceed 2.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
39. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

42. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start event shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
43. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
45. The requirements of 40 CFR 72.6 (b) do not apply to this source because it is not a Title IV source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
46. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: 40 CFR 60.332(a), 60.335 (a), (b) and (c) . A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, 6.2.4, 6.3, 6.4.1, 6.4.3 and 6.4.5. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-385-64

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-1Y SERVING 770 STEAM ENHANCED WELLS INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, GAS FLOW AND TEMPERATURE INDICATORS, AUTOMATIC WELL TEST STATIONS, AND GAS PIPING TO SCRUBBED STEAM GENERATORS, OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. The operation includes gauge vessel(s), heat exchanger(s), gas/liquid separator(s), condensate tank(s), vapor compressor(s), gas volume flow rate and temperature indicators, and gas piping to either TEOR permit S-1128-116 collection system, TEOR permit S-1128-130 collection system, scrubbed steam generators S-1128-3, '-24, '-25, '-26, and '-29 through '-34, or DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in gas processed shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from components in vapor and condensate service shall not exceed 380.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components to be screened and counted for determining compliance with fugitive VOC limit listed above shall be identified and categorized according to the appropriate fluid types (gas or water/oil) in Table 2-4 of the EPA's "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017) and the following component types: valves, fittings, threaded connections, open-ended lines, pumps, compressors, pressure relief devices, pipes, flanges, process drains, sealing mechanisms, hatches, sight-glasses, meters, or seal fluid systems. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and a copy of DOGGR approval of disposal well(s). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall maintain for a period of five years, accurate daily records of volume of vapors handled, a list of all thermally enhanced production wells associated with this operation, accurate records of fugitive inspection component counts and leak inspection results, and make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using the EPA "1995 Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), Oil and Gas Production Operations Average Emission Factors, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall keep steam-enhanced crude oil production wells operated with open vents connected to a VOC collection and control system. Steam-enhanced crude oil production wells operated with closed vents shall produce to front-line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) and are connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
13. Permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
14. The inspection and re-inspection requirements of Rule 4401, Sections 5.8.1 through 5.8.5, do not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent or less (10 wt. %) as determined using ASTM Method D1945 for gases and SCAQMD Method 304-91, or the latest revision of ASTM Methods E168, E169 or E260, for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit
15. Permittee shall maintain a current listing of wells with a packer installed and include the label "Packer" on wells with packers. Wells with a packer are not subject to VOC emissions checks and are not open-ended lines under Rule 4401. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
16. The requirements of Rule 4401 do not apply to components serving the produced fluid line. [District Rule 4401] Federally Enforceable Through Title V Permit
17. Except for the requirements of Sections 6.1, 6.6.6, and 7.2 of Rule 4401, the requirements of Rule 4401 shall not apply to the following components: pressure relief devices, pumps, and compressors that are enclosed and whose emissions are controlled with an operating VOC collection and control system, components buried below ground, components used exclusively in vacuum service, and one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using EPA Test Method 21. [District Rule 4401] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-390-11

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

797 CYCLIC WELLS WITH CLOSED CASING VENTS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-400-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF FWKO TANK (T-11) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019
CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-401-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF FWKO TANK (T-12) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-402-14

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

360 BBL FIXED ROOF CONSTANT LEVEL CRUDE OIL STORAGE TANK (T-19) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
15. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-404-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF WASH TANK (T-21) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-405-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF WASH TANK (T-22) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-406-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF WASH TANK (T-23) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-407-11

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-40) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-409-9

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

214,326 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-411-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-31) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor recovery system, permit S-1128-1019, except during District approved cleaning and during maintenance procedures. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1129-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rule 4623]
5. Maximum VOC content of vapor in the tank vapor space shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall conduct quarterly gas sampling of gas handled by TVR system. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC content of vapor by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945, D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
8. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3 and 5.6] Federally Enforceable Through Title V Permit
9. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
10. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District NSR Rule and District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
12. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District NSR Rule and District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
14. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
17. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
18. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
23. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
24. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
25. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
28. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District NSR Rule] Federally Enforceable Through Title V Permit
32. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
36. Operator shall keep records of VOC content of tank vapors as required under this permit and shall make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-412-12

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-32) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor recovery system, permit S-1128-1019, except during District approved cleaning and during maintenance procedures. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1129-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rule 4623]
5. Maximum VOC content of vapor in the tank vapor space shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall conduct quarterly gas sampling of gas handled by TVR system. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC content of vapor by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945, D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
8. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3 and 5.6] Federally Enforceable Through Title V Permit
9. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
10. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District NSR Rule and District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
12. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District NSR Rule and District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
14. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
17. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
18. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
23. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
24. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
25. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
28. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District NSR Rule] Federally Enforceable Through Title V Permit
32. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. Operator shall keep records of VOC content of tank vapors as required under this permit and shall make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

35. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
37. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-416-6

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

7,602 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-428-6

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

11,004 GALLON FIXED DRAIN TANK TS #4

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-438-6

EXPIRATION DATE: 02/29/2016

SECTION: SW5 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-699-6

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

43,764 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-704-6

EXPIRATION DATE: 02/29/2016

SECTION: NE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

124,740 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-706-6

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

212,100 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-708-6

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,386 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-709-6

EXPIRATION DATE: 02/29/2016

SECTION: NW26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,386 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-713-6

EXPIRATION DATE: 02/29/2016

SECTION: SE26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

22,344 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-717-6

EXPIRATION DATE: 02/29/2016

SECTION: SW25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

21,882 GALLON FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-839-8

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:
5 UNCONTROLLED CYCLIC WELLS

PERMIT UNIT REQUIREMENTS

1. All wells authorized by this permit to operate shall be located more than 1000 feet from an existing well vent vapor recovery system operated by the company. [District Rule 4401, 4.4.1] Federally Enforceable Through Title V Permit
2. Permittee shall maintain a current well roster of all uncontrolled cyclic wells, and such roster shall be made readily available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-921-9

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

158 STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
4. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-934-15

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

14.8 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS

PERMIT UNIT REQUIREMENTS

1. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. Upon District request, a two hour observation shall be conducted. [40 CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is air-assisted or steam-assisted. [40 CFR 60.18 (c)(3)] Federally Enforceable Through Title V Permit
6. The higher heating value (hhv) of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(f)(3) and using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3-6)] Federally Enforceable Through Title V Permit
7. Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
8. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit
9. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than the velocity, V_{max} , as determined by the equation specified in paragraph 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
10. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)] Federally Enforceable Through Title V Permit
12. If flare is not operating, gas shall not be vented to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Gas flow rate to flare shall not exceed 335.2 MMBtu per day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Gas flow rate to flare shall not exceed 2,000.6 MMBtu per year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined daily flow rate of pilot and purge gas shall not exceed 20,000 dscf of natural gas per day or 5,580 scf/day (153.8 gal/day) of liquefied petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
16. Concentration of sulfur (as H₂S) in gas flared shall not exceed 30,000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Flare shall not be operated continuously for more than 30 consecutive days. Flare is not continuous when flaring has ceased for three (3) or more consecutive hours. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall determine sulfur content of gas flared at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Emissions from flared gas shall not exceed any of the following (based on total gas combusted): PM₁₀: 0.008 lb/MMBtu; NO_x (as NO₂): 0.068 lb/MMBtu; VOC: 0.056 lb/MMBtu; or CO: 0.31 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Emission rate from natural gas pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.068 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM₁₀ - 0.008 lb/MMBtu, CO - 0.310 lb/MMBtu, or VOC - 0.056 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
21. Emission rate from LPG/propane pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM₁₀ - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
22. If the flare's actual NO_x emissions exceed 593 lb-NO_x per calendar year, the permittee must report to the District the annual NO_x emissions as calculated pursuant to paragraph 40 CFR 51.165(a)(6)(iii) and any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection). Such information must be submitted to the District for a period of 5 calendar years beginning the year of operation under ATC S-1128-934-14 and shall be submitted within 60 days of the end of each calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the flare's actual VOC emissions exceed 488 lb-VOC per calendar year, the permittee must report to the District the annual VOC emissions as calculated pursuant to paragraph 40 CFR 51.165(a)(6)(iii) and any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection). Such information must be submitted to the District for a period of 5 calendar years beginning the year of operation under ATC S-1128-934-14 and shall be submitted within 60 days of the end of each calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain daily and annual records of combined daily and annual heat input to the pilot/purge and flare (MMBtu/day, MMBtu/yr), calculated using daily and annual flow rates of pilot/purge gas and flare gas (dscf/day, dscf/yr) and hhvs of pilot/purge gas and flared gas, and annual records of pilot/purge gas and flared gas sulfur content. Records shall be kept for at least five years and shall be made readily available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-935-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,156 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-13) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-936-13

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

12,086 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-25) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-938-10

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

380 BBL CONSTANT LEVEL CRUDE OIL SURGE TANK (T-18) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201 and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The tank shall vent to vapor control system listed in S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fugitive VOC emissions from this tank and associated vapor recovery system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
19. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-941-11

EXPIRATION DATE: 02/29/2016

SECTION: SE08 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall maintain 0.05 mile of paved asphalt roadway per District "Roadway Maintenance Requirements" guideline. Roadway shall be part of the 4.97 miles of roadway within the Cymric Field, Sections 25, 35 and 36, T29S/R21E, Section 31, T29S/R22E and Section 6, T30S/R22E, designated by Chevron and identified on the map submitted for Project 1000959. [Rule 2201] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 1.0 grains-S per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods, NO_x emissions from the steam generator shall not exceed 15 ppmvd @ 3% O₂ or 0.018 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods, CO emission from the steam generator shall not exceed 29 ppmvd @ 3% O₂ or 0.021 lb/MMBtu. [District Rule 2201 and Rules 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,855 lb-NO_x/yr, 31.5 lb-CO/day, and 11,498 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-949-5

EXPIRATION DATE: 02/29/2016

SECTION: 36 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
4. Emissions from this engine shall not exceed any of the following limits: 3.7 g-NO_x/bhp-hr , 0.1 g-PM₁₀/bhp-hr, 0.5 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.1 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [13 CCR 2423 and 17 CCR 93115]
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-950-3

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

UP TO 14' O.D. X 61' (1670 BBL) CRUDE OIL INLET GAS SEPARATOR VESSEL V-2A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Maintenance and Inspection Conditions on the facility wide permit S-1128-0. Deviations from a standard shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vapors from separator vessel V-2A shall be routed to casing collection system S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Separator vessel V-2A shall not receive production from wells operated with closed casing vents when the vapor control system is inoperable. For thermally enhanced oil recovery wells producing to separator, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of total organic compounds in gas processed by separator vessel V-2A shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall determine VOC content of total organic compounds in gas within 60-days of startup and annually thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in vapor service dedicated to separator vessel V-2A shall not exceed 7.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The fugitive VOC emission limit listed above does not include components in liquid service, or existing production handling and flow measurement facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate records of VOC content of total organic compounds in gas and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-951-5

EXPIRATION DATE: 02/29/2016

SECTION: 6 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
4. Emissions from this engine shall not exceed any of the following limits: 3.7 g-NO_x/bhp-hr , 0.5 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.1 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-952-9

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

30.0 MMBTU/HR NATURAL GAS, PROPANE, OR BUTANE-FIRED STRUTHERS STEAM GENERATOR S/N 75/76-37153-2 WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (ALSO PERMITTED AS S-2010-200 IN LOW SS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
4. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
5. This steam generator is authorized to operate at CUSA's light oil western stationary source (LOWSS) as permit S-2010-200 or CUSA's heavy oil western stationary source as permit S-1128-952. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The District shall be notified at least 7 days prior to each transfer between District approved locations, giving the exact location of the move. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Production from wells thermally enhanced by this steam generator shall be routed only to existing vapor controlled tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total sulfur content of fuel combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
9. Source testing for NOx and CO for each approved fuel shall be conducted within 60 days of first firing on fuel. [District Rule 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
11. Except during startup and shutdown emission rates shall not exceed any of the following: PM10: 0.0076 lb/MMBTU, NOx (as NO2): 12 ppmv @ 3% O2 or 0.014 lb/MMBTU, VOC: 0.0055 lb/MMBTU, or CO: 50 ppmv @ 3% O2. [District Rule 2201 and District Rule 4306] Federally Enforceable Through Title V Permit
12. Unit shall not be located within 1000 ft of a school. [CH&SC 42301.6]
13. Formerly S-1128-927.

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-957-3

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

470 BHP CUMMINS, MODEL QSM11-G4, DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 300 KW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 2.33 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.17 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
7. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-959-3

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E . [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-960-3

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E . [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-961-3

EXPIRATION DATE: 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. This steam generator is permitted to operate at the following locations: NE, NW, SE, SW of Sec 1, T30S/R21E; NW, SE, SW of Sec 7, T30S/R22E; NE, NW, SE, SW of Sec 17, T30S/R22E; NE, NW, SE, SW of Sec 18, T30S/R22E; SE Sec 8, T30S, R22E, and NW Sec 36, T29S, R21E . [District Rule 4102]
4. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM₁₀: 0.006 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6344 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-974-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 1,000 barrels per day (monthly daily average) and 300,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-975-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-976-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-977-5

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is authorized to operate at CUSA's heavy oil western stationary source (HOWSS) which includes facilities S-1128, S-1129 and S-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
12. Tank liquid throughput shall not exceed 750 barrels per day and 91,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity and throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-978-3

EXPIRATION DATE: 02/29/2016

SECTION: SW 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

250 HORSEPOWER CUMMINS MODEL QSB7-G3 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE
POWERING AN ELECTRICAL GENERATOR (31X CONTROL ROOM, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-3 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 0.746 g-CO/bhp-hr, or 0.149 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed 0.082 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-979-2

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

470 HP CUMMINS MODEL QSM11-G4 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #4, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-3 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 2.34 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.123 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.06 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-980-2

EXPIRATION DATE: 02/29/2016

SECTION: NE36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

755 HP CUMMINS MODEL QSX15-G9-NR2 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #5, CYMRIC OILFIELD)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Emergency Standby IC Engine Conditions, IC Engine General Conditions, IC Engine Fuel Monitoring Conditions, and IC Engine Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This engine shall be EPA/CARB TIER-2 certified. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with a positive crankcase ventilation (PCV) system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 4.04 g-NOx/bhp-hr, 0.522 g-CO/bhp-hr, or 0.213 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.097 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115, CH&SC 41701.6, and 40 CFR 63, ZZZZ and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-981-5

EXPIRATION DATE: 02/29/2016

SECTION: 1 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

TEOR OPERATION WITH UP TO 100 WELLS, INCLUDING OPEN OR CLOSED CASING VENTS, WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, WITH THE VAPORS PIPED TO THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617 AND/OR FLARE S-1128-1004

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Thermally Enhanced Oil Recovery (TEOR) Wells General Conditions, TEOR Wells Fuel Monitoring Conditions, TEOR Wells Source Testing Conditions, and TEOR Wells Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The Permittee shall maintain with the permit accurate fugitive component counts for components in gas/vapor service, and the resulting emissions calculations using the emissions factors in Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of the non-condensable casing vapors shall not exceed 70% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive emissions from the TEOR system components shall not exceed 53 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall test the TEOR gas annually for VOC content at the header upstream of the 31E Oil Cleaning Plant. [District Rule 2201] Federally Enforceable Through Title V Permit
6. For wells with the casing vents open, the well vent shall be connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
7. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.6.2.1] Federally Enforceable Through Title V Permit
8. There shall be no components with a major liquid leak as defined in Section 3.20.2 of Rule 4401. [District Rule 4401, 5.6.2.2] Federally Enforceable Through Title V Permit
9. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.6.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401, 5.6.2.4] Federally Enforceable Through Title V Permit
11. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.7.3] Federally Enforceable Through Title V Permit
12. Unless otherwise specified in Section 5.8, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.8] Federally Enforceable Through Title V Permit
13. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.8.5] Federally Enforceable Through Title V Permit
14. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.8.6] Federally Enforceable Through Title V Permit
15. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401, 5.9.4] Federally Enforceable Through Title V Permit
16. The time of the initial leak detection shall be the start of the repair period specified in Table 4. [District Rule 4401, 5.9.6] Federally Enforceable Through Title V Permit
17. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
18. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
19. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.9] Federally Enforceable Through Title V Permit
20. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
21. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.11] Federally Enforceable Through Title V Permit
22. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to this Rule by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components, 5) Except for pipes, the location of components subject to this Rule, 6) Except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by this Rule and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 through 6.6.9] Federally Enforceable Through Title V Permit
24. The operator of any new steam-enhanced crude oil production well, or any non-steam-enhanced crude oil production well converted to a steam-enhanced crude oil production well, which commences steam-enhancement operations on or after April 11, 1991, shall comply with the requirements of this rule and the applicable permit requirements of Rule 2201 (New and Modified Stationary Source Review Rule) before steam injection and no later than the first detectable flow at the casing vent. [District Rule 4401, 7.1] Federally Enforceable Through Title V Permit
25. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.3, 4.4, 4.5, 4.8 or 4.9 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of this rule. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit
26. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4401, 6.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-986-2

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

10,500 GALLON (250 BBL) OPEN TOP PETROLEUM STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-989-10

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

26 C OIL CLEANING PLANT VAPOR CONTROL SERVING TANKS S-1128-229, '-701, '-703, '-923, AND '-1015 INCLUDING 561,000 BTU/HR HEAT EXCHANGER, KNOCKOUT VESSEL, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1128-36, '-48, S-1141-555, '-556, AND '-557, FLARE S-1141-513, AND APPROVED INJECTION WELL(S)

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall consist of a closed system that collects VOCs from the District approved knockout vessel(s) and storage tanks and discharges to District approved VOC control devices. The vapor control system shall be APCO-approved. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99% by weight as determined by the test method(s) specified in District Rule 4623. [District Rules 2201] Federally Enforceable Through Title V Permit
2. Vapor control equipment compressor shall activate before the pressure relief valve vents on any of the units served by the vapor control equipment when operational. Vapor recovery system may be inoperable during maintenance/repairs/upset conditions for up to 600 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control system may be inoperable during maintenance/repairs/upset conditions of tanks S-1128-229, '-701, '-703, '-923 and/or '-1015 for up to 600 hours per year. District-approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum VOC content of vapor in the vapor recovery system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Except for components that are part of a critical process unit, as defined by this permit, leaking components shall be repaired within 15 days of discovery. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 2520] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall conduct quarterly sampling from the 26C OCP tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If vapors sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of tanks S-1128-229, '701, '703, '923 and '1015. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-991-5

EXPIRATION DATE: 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is permitted to operate at the following locations: 2F (NW/4 of Sec 2, T12N, R24W), 31E (SW/4 of Sec 31, T12N, R23W), 26C (SE/4 of Sec 26, T32S, R23E), Station 1-09 (SW/4 of Sec 9, T32S, R23E), Station 2-22 (SE/4 of Sec 22, T31S, R22E) and 21S Seep (SE/4 of Sec 21, T32S, R23E). [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.49 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Crude oil throughput shall not exceed 475 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from the tank shall not exceed 24.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-992-5

EXPIRATION DATE: 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank General Conditions, Heavy Oil Tank Fuel Monitoring Conditions, Heavy Oil Tank Source Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank is permitted to operate at the following locations: 2F (NW/4 of Sec 2, T12N, R24W), 31E (SW/4 of Sec 31, T12N, R23W), 26C (SE/4 of Sec 26, T32S, R23E), Station 1-09 (SW/4 of Sec 9, T32S, R23E), Station 2-22 (SE/4 of Sec 22, T31S, R22E) and 21S Seep (SE/4 of Sec 21, T32S, R23E). [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.49 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Crude oil throughput shall not exceed 475 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from the tank shall not exceed 24.4 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-993-2

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

2,076 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (26C FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 3000 barrels per day or 105,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 165.5 lb/day or 11,906 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
12. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-994-2

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,600 BBL FREE WATER KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '-556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '-48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-995-2

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,600 BBL FREE WATER KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND ' -556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND ' -48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-996-1

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

150 BBL EMERGENCY USE VESSEL (V-120) (26C FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201] Federally Enforceable Through Title V Permit
4. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that: 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; and 4) is necessary to prevent or control an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The owner or operator shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
14. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-997-2

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

469 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (31E FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 1000 barrels per day or 120,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 55.6 lb/day or 8044 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
12. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-998-1

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:

700 BBL GAS KNOCKOUT VESSEL (V-100) WITH VAPOR CONTROL SYSTEM CONSISTING OF MISC. VAPOR CONTROL EQUIPMENT AND VENTED TO STEAM GENERATORS S-1128-15 AND '-18 (31E FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Total VOC emissions fugitive rate from tanks S-1128-998 and '999 and vapor control system components associated with these emission units shall not exceed 31.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 70% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate component count for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
13. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1000-1

EXPIRATION DATE: 02/29/2016

SECTION: 2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

1,600 BBL GAS KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
8. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1001-1

EXPIRATION DATE: 02/29/2016

SECTION: 2 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:

1,600 BBL GAS KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1004-3

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-2010-317) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S HEAVY OIL WESTERN STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare shall not operate within 1000 ft from a receptor (business or residence). [District Rule 4102]
4. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
5. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site when in use. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
6. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
7. Permittee shall inspect the flare in operation for visible emissions at each new location. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The flame shall be present at all times when combustible gases are vented through the flare. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
9. Flare shall be equipped with operational automatic re-ignition provisions. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
10. Daily flared gas heat input, except pilot fuel, shall not exceed 600 MMBtu per day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Annual flared gas heat input, except pilot fuel, shall not exceed 60 billion Btu per year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flared gas sulfur content shall not exceed 75.0 gr S/100 scf or 1,200 ppmv H₂S. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: 0.008 lb-PM₁₀/MMBtu, 0.068 lb-NO_x/MMBtu (as NO₂), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall document compliance with flared gas sulfur content at each new location of operation of the flare by performing H₂S analysis of flared gas using Draeger tube analysis. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. Permittee shall determine sulfur content of gas flared at startup and at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Operator shall determine hhv of gas flared at time of sulfur testing by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content, and daily and annual flared gas heat input rates; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1014-2

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL CRUDE OIL STORAGE TANK (T-33) CONNECTED TO TANK '1-1019 VAPOR CONTROL SYSTEM (31X OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, Heavy Oil Tank Testing Conditions, and Heavy Oil Tank Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to the vapor collection system listed on permit S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor control system shall not exceed the amount specified on S-1128-1019. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Tank shall not be required to be served by vapor control system S-1128-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per rolling 12-month period. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During temporary periods of maintenance/repair/upsets covered by this permit , operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Tank shall not receive production from wells operated with closed casing vents when vapor control system is inoperable for tank maintenance/repairs/upset conditions. For TEOR wells producing to tank, records of dates well casing valves are open or closed shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1015-4

EXPIRATION DATE: 02/29/2016

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

380 BBL WEMCO AIR FLOATION UNIT #M-901 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions, Heavy Oil Tank Cleaning Conditions, and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1128-989 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per calendar year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
4. Maximum VOC content of tank vapors shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
6. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1018-2

EXPIRATION DATE: 02/29/2016

SECTION: 2 **TOWNSHIP:** 11S **RANGE:** 24W

EQUIPMENT DESCRIPTION:

2000 BBL DRAIN TANK WITH NATURAL GAS BLANKETING (2F OCP)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Cleaning Conditions and Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Tank liquid throughput shall not exceed 2,000 barrels per day or 70,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from the tank shall not exceed 103.0 lb/day or 4,588 lb/year. [District Rule 2201 and 40 CFR Part 60, Subpart OOOO] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 2080] Federally Enforceable Through Title V Permit
13. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1019-3

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

CYMRIC 31X OIL CLEANING PLANT VAPOR CONTROL SYSTEM SHARED WITH 22 PERMIT UNITS; INCLUDING HEAT EXCHANGER(S), G/L SEPARATORS, GAS COMPRESSORS, & GAS PIPING TO EITHER TEOR PERMIT S-1128-116 COLLECTION SYSTEM, SCRUBBED STEAM GENERATORS S-1128-3, -24, -25, -26, AND -29 THROUGH -34, OR DOGGR APPROVED DISPOSAL WELLS

PERMIT UNIT REQUIREMENTS

1. Vapor control system may be inoperable during maintenance/repairs/upset conditions of tanks S-1128-248, -250, -262, -263, -400, -401, -402, -404, -405, -406, -407, -411, -412, -935, -936, -938, -1014, and -1020 for up to 600 hours per rolling 12-month period. District-approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Inspection, monitoring, and repair if necessary of fugitive emissions components installed when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be done within 7 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Records of the dates, hr/day, and hr/yr when vapor control system is inoperable for tank maintenance/repairs/upset conditions shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 from the total number of vapor components associated with tank and vapor control system shall not exceed 112.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The vapor control system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

8. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The efficiency of any VOC destruction device shall be measured by USEPA Method 18, 25, 25a, or 25b. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC limit listed above does not include components handling produced fluids with an API gravity less than 30 degrees, or components in water/oil service (condensate) with a water content equal to or greater than 50% by weight, or components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Vapor control equipment compressor shall activate before the pressure relief valve vents on any of the units served by the vapor control equipment when operational. Vapor recovery system may be inoperable during maintenance/repairs/upset conditions for up to 600 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: near constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, storage of coatings, adhesives, sealants, and organic solvents in closed containers, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. A leak is defined as a reading of methane on a portable hydrocarbon detection instrument (calibrated with methane) in excess of 10,000 ppm when measured pursuant to EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
16. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1020-1

EXPIRATION DATE: 02/29/2016

SECTION: SW31 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED-ROOF WASH TANK (T-27) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor recovery system, permit S-1128-1019, except during District approved cleaning and during maintenance procedures. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Tank shall not be required to be served by vapor control system S-1129-1019 during vapor recovery system (tanks to disposal devices, inclusive) maintenance/repairs/upset conditions for up to 600 hours per year. Approved breakdowns and relief periods granted by variance and supported by the District shall not be included in this limit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During temporary periods of maintenance/repair/upsets covered by this permit, operator shall use work practices to minimize VOC emissions including: constant level tank operation, use of operational P/V valve where possible, work completed expeditiously with pre-staging of equipment and material and pre-fabrication of parts, minimization of tank openings and liquid drainage from disconnects, inspection, monitoring, and repair if necessary of fugitive emissions components at job site within 30 days of completion of work. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor control system for maintenance/repairs/upset conditions, tank will store organic liquid with a true vapor pressure less than 0.5 psia. [District Rule 4623]
5. Maximum VOC content of vapor in the tank vapor space shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall conduct quarterly gas sampling of gas handled by TVR system. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC content of vapor by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945, D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
8. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3 and 5.6] Federally Enforceable Through Title V Permit
9. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
10. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District NSR Rule and District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
12. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District NSR Rule and District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
14. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080] Federally Enforceable Through Title V Permit
17. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 2080] Federally Enforceable Through Title V Permit
18. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
21. VOC content of total hydrocarbons in gas processed by the vapor control system shall not exceed 50% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
22. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
24. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District NSR Rule] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
26. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
29. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Any component found to be leaking on two consecutive annual inspections is in violation of the District NSR Rule, even if it is under the voluntary inspection and maintenance program. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b. [District NSR Rule] Federally Enforceable Through Title V Permit
34. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
35. Operator shall keep records of VOC content of tank vapors as required under this permit and shall make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The District shall be notified within 24 hours of each maintenance/repairs/upset period. Records of the date, time, duration, rolling 12-month duration with end of month totals, and description of the activity shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
38. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1023-1

EXPIRATION DATE: 02/29/2016

SECTION: NE34 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

25.2 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #60; DIS# 20754-66) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FGR - DERBY ACRES LEASE

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Steam Generator General Conditions, Steam Generator Dormant Emissions Unit Conditions, Steam Generator Fuel Monitoring Conditions, Steam Generator Source Testing Conditions, and Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or modifications required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform fuel sulfur content certification, tuning, and monitoring requirements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing, fuel sulfur content certification, tuning, and monitoring requirements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with a non-resettable, operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit unit: PTO S-1129-386. [District Rules 2201,4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
7. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, permittee shall not exceed the following: PM10: 0.010 lb/MMBtu, SOx: 1.768 lb/MMBtu, VOC: 0.003 lb/MMBtu, [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, permittee shall not exceed the following: NOx (as NO2): 0.0365 lb/MMBtu or 30 ppmv @ 3% O2 or CO: 0.0355 lb/MMBtu or 48 ppmv @ 3% O2 , except during start-up or shutdown. [District Rules 2201] Federally Enforceable Through Title V Permit
10. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 22.1 lb-NOx/day, 1,095 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.5 lb-CO/day, and 1,065 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 1070]
12. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1024-1

EXPIRATION DATE: 02/29/2016

SECTION: SW18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

10,000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM5 STA. L

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Host vapor pressure (ROC - C2) of any organic liquid introduced to the tank shall not exceed 0.23 psia. [District Rule 4623, and District NSR Rule] Federally Enforceable Through Title V Permit
3. Daily volume of liquids introduced into tank shall not exceed 16,000 barrels on any given day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual volume of liquids introduced into tank shall not exceed 960,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1025-1

EXPIRATION DATE: 02/29/2016

SECTION: SW18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

1110 BBL GAS/LIQUID SEPARATOR VESSEL V-100 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

PERMIT UNIT REQUIREMENTS

1. Equipment may include a compressor, or a compressor and chiller. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall comply in full with all applicable Rule 4401 requirements. [District Rule 4401] Federally Enforceable Through Title V Permit
3. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above the ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall demonstrate that any components in condensate service handle fluid streams that contain at least 50% water (by weight). If the components are shown to contain greater than 80% water (by weight), then no further demonstration will be required, otherwise annual analysis will be required. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of fugitive leak inspection results. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct gas sampling at McKittrick MCK-DIA-VOC sample point located between the Master Trap Vessel and the first liquid knockout vessel to qualify for exemption from fugitive component counts for components handling fluids with 10% or less VOC by weight. The testing required by permit S-1129-864 shall be used to demonstrate compliance, which is representative of all components downstream of the first liquid knockout vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually). Testing performed for permit S-1129-864 shall be deemed representative of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1026-1

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

906 BBL GAS/LIQUID SEPARATOR VESSEL V-200 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE

PERMIT UNIT REQUIREMENTS

1. Equipment may include a compressor, or a compressor and chiller. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall comply in full with all applicable Rule 4401 requirements. [District Rule 4401] Federally Enforceable Through Title V Permit
3. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above the ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Permittee shall demonstrate that any components in condensate service handle fluid streams that contain at least 50% water (by weight). If the components are shown to contain greater than 80% water (by weight), then no further demonstration will be required, otherwise annual analysis will be required. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of fugitive leak inspection results. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct gas sampling at McKittrick MCK-DIA-VOC sample point located between the Master Trap Vessel and the first liquid knockout vessel to qualify for exemption from fugitive component counts for components handling fluids with 10% or less VOC by weight. The testing required by permit S-1129-864 shall be used to demonstrate compliance, which is representative of all components downstream of the first liquid knockout vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content of the gas (sampled not less than annually). Testing performed for permit S-1129-864 shall be deemed representative of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1027-1

EXPIRATION DATE: 02/29/2016

EQUIPMENT DESCRIPTION:

1190 BBL (12.5 FT DIA X 50 FT) HEAVY CRUDE OIL WET LACT SEPARATOR VESSEL AND ASSOCIATED PIPING AND COMPONENTS, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1022

PERMIT UNIT REQUIREMENTS

1. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1128-0. Deviations from a standard condition shall be reported under the applicable condition in S-1128-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Except for releases from pressure relief valve(s), vapors separated from fluid handled by vessel shall be handled only in closed and/or vapor controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All vapor and condensate service piping, fittings, and valves dedicated to the vapor recovery system shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from components which have been tagged by the facility operator for repair within 15 days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. An operator shall reinspect a component for leaks within working 30 days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All gas/light liquid components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, polish rod stuffing boxes and other (pressure relief devices, compressor seals, meters, etc.). [District Rule 2201] Federally Enforceable Through Title V Permit
7. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All vapor service piping, fittings, and valves dedicated to the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 ft above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Maximum VOC content of vapor in the vessel vapor control system shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions from components in vapor service shall not exceed 10.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit accurate fugitive component counts of vapor handling equipment and resulting emissions calculated using the average fugitive emissions factors in the USEPA's 1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017, Table 2-4). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall conduct quarterly gas sampling. If gas samples are less than 50% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of the VOC content of vapor in the vessel vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
15. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1028-1

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #1 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O2; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O2 CONCENTRATIONS

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
6. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.4360, 40 CFR 60.4365(a), 40 CFR 60.4370(c)] Federally Enforceable Through Title V Permit
7. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Upon concluding the initial shakedown period, emissions from the gas turbine system, except during periods of startup, shutdown, and black start, shall not exceed any of the following limits: 5 ppmvd NOx @ 15% O2 referenced as NO2; 29 ppmvd CO @ 15% O2; 0.013 lb-PM10/MMBtu; 0.024 lb-VOC/MMBtu referenced as methane; and 0.00233 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
9. Upon concluding the initial shakedown period, emissions from the gas turbine system shall not exceed any of the following limits: 64.1 lb-NOx/day referenced as NO2; 1,658.9 lb-CO/day; 5.8 lb-SOx/day; 32.1 lb-PM10/day; 138.8 lb-VOC/day referenced as methane; and 70.2 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon concluding the initial shakedown period, the emissions from the gas turbine system shall not exceed any of the following limits: 16,615 lb-NO_x/year; 65,810 lb-CO/year; 2,102 lb-SO_x/year; 11,730 lb-PM₁₀/year; 22,052 lb-VOC/year; 25,637 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine systems (S-1129-868, '-869) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 40 CFR 60.4400(a)] Federally Enforceable Through Title V Permit
19. Unit shall demonstrate compliance annually with NO_x and CO emissions limits with the duct burner in operation and not in operation. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60.4400 (1)(i)] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.4340(b)(1) and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
24. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit
25. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
26. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1129-868, '-869), and rotate the unit tested so that the two units are tested over two years, 2) annual RAA testing for the one gas turbine engine for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rule 1080] Federally Enforceable Through Title V Permit
28. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4350] Federally Enforceable Through Title V Permit
30. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

32. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
33. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 40 CFR 60.4375(a) and 40 CFR 60.4395] Federally Enforceable Through Title V Permit
34. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.4380(b)(2)] Federally Enforceable Through Title V Permit
35. If the gas turbine system is not fired on PUC-regulated or FERC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using ASTM D1072; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rule 4703] Federally Enforceable Through Title V Permit
37. Except during black start, start-up shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Shutdown shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703]
Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-1029-1

EXPIRATION DATE: 02/29/2016

SECTION: 18 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #2 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O2; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O2 CONCENTRATIONS

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The sulfur content in the fuel being combusted shall not exceed 0.71 grains/100 scf, otherwise, the fuel shall be of PUC-regulated quality. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If the gas turbine system is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
6. If the gas turbine system is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.4360, 40 CFR 60.4365(a), 40 CFR 60.4370(c)] Federally Enforceable Through Title V Permit
7. HHV and LHV of the fuel shall be determined by using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Upon concluding the initial shakedown period, emissions from the gas turbine system, except during periods of startup, shutdown, and black start, shall not exceed any of the following limits: 5 ppmvd NOx @ 15% O2 referenced as NO2; 29 ppmvd CO @ 15% O2; 0.013 lb-PM10/MMBtu; 0.024 lb-VOC/MMBtu referenced as methane; and 0.00233 lb-SOx/MMBtu referenced as SO2. NOx and CO emission limits are based on 3-hour rolling average period. If unit is in either startup, shutdown, or black start mode during any portion of a clock hour, the unit will not be subject to the ppmvd limits for NOx and CO during that clock hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
9. Upon concluding the initial shakedown period, emissions from the gas turbine system shall not exceed any of the following limits: 64.1 lb-NOx/day referenced as NO2; 1,658.9 lb-CO/day; 5.8 lb-SOx/day; 32.1 lb-PM10/day; 138.8 lb-VOC/day referenced as methane; and 70.2 lb-NH3/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon concluding the initial shakedown period, the emissions from the gas turbine system shall not exceed any of the following limits: 16,615 lb-NO_x/year; 65,810 lb-CO/year; 2,102 lb-SO_x/year; 11,730 lb-PM₁₀/year; 22,052 lb-VOC/year; 25,637 lb-NH₃/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia (NH₃) emissions shall not exceed 21 ppmvd @ 15% O₂ over a 24-hour average period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to measure start-up mass emission rates of NO_x, CO, and VOC shall be conducted for one of the gas turbine systems (S-1129-868, '-869) at least once every seven years. CEMS relative accuracy shall be determined during source testing in accordance with the procedure listed in 40 CFR Part 60, Appendix F with any necessary changes approved by the District. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) during normal operation shall be conducted annually. [District Rules 2201 and 40 CFR 60.4400(a)] Federally Enforceable Through Title V Permit
19. Unit shall demonstrate compliance annually with NO_x and CO emissions limits with the duct burner in operation and not in operation. An annual demonstration of compliance with the duct burner in operation is not required in any year in which the duct burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the duct burner. An annual demonstration of compliance with the duct burner not in operation is not required in any year in which the duct burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. For the purpose of determining compliance with the emissions limits (ppmvd @ 15% O₂) during normal operation in this permit, the arithmetic mean of three test runs shall apply, unless two of the three results are above an applicable limit. If two of three runs are above the applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. The following test methods shall be used: NO_x - EPA Method 7E or 20 or CARB Method 100; CO - EPA Method 10 or 10B or CARB Method 100; VOC - EPA Method 18 or 25; PM₁₀ - EPA Method 5 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O₂ - EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60.4400 (1)(i)] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) which continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided that CEMS passes the relative accuracy requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS-2) and District approved protocol for startups. If relative accuracy of CEMS cannot be demonstrated during the startup, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from the source test conducted by the facility to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.4340(b)(1) and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
24. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit
25. The NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
26. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CEMS must be audited at least once each calendar quarter. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The requirements in 40 CFR 60, Appendix F, shall be met through the following EPA and District approved modified procedures: 1) annual RATA testing of at least one gas turbine engine (S-1129-868, '-869), and rotate the unit tested so that the two units are tested over two years, 2) annual RAA testing for the one gas turbine engine for which the annual RATA testing is not performed, 3) if any of the gas turbine engines fail the RAA testing, they must have a RATA test within 60 days, and 4) for every quarter that RATA or RAA testing is not performed, a CGA is to be performed for each gas turbine engine. [District Rule 1080] Federally Enforceable Through Title V Permit
28. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4350] Federally Enforceable Through Title V Permit
30. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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32. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
33. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 40 CFR 60.4375(a) and 40 CFR 60.4395] Federally Enforceable Through Title V Permit
34. Monitor downtime for NOx shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx concentration or diluent O2 (or both). [40 CFR 60.4380(b)(2)] Federally Enforceable Through Title V Permit
35. If the gas turbine system is not fired on PUC-regulated or FERC-regulated natural gas, then a fuel sample shall be collected during the source test to determine sulfur content of the fuel combusted in the turbine. The fuel sample shall be analyzed for the total sulfur content using ASTM D1072; D3246; D4084; D4468; D6228; or D6667; or double GC for H2S and mercaptans. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of dilution ratio) may be used after getting a prior approval from the District. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit
36. A totalizing mass or volumetric fuel flow computer shall be utilized and maintained to calculate the amount of natural gas combusted based on measured flow meter parameters (fuel pressure and temperature) and gas composition. [District Rule 4703] Federally Enforceable Through Title V Permit
37. Except during black start, start-up shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
38. Shutdown shall not exceed 2.0 hours per event. [District Rule 4703] Federally Enforceable Through Title V Permit
39. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup (black start) and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
40. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
42. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
43. A black start event is defined as the startup of a unit while the cogen plant is electrically separated from the utility grid. A black start shall not exceed 4.0 hours per event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and each shutdown time period. [District Rule 4703]
Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

ATTACHMENT C

Detailed Facility List

Detailed Facility Report
For Facility=1128
Sorted by Facility Name and Permit Number

CHEVRON USA INC	FAC #	S 1128	TYPE:	TitleV	EXPIRE ON:	02/29/2016
HEAVY OIL WESTERN STATIONARY SOURCE	STATUS:	A	TOXIC ID:	50301	AREA:	5 / 72
KERN COUNTY	TELEPHONE:	6616547000			INSP. DATE:	04/22

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-1-14	25,200,000 BTU/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# PORT 24)
S-1128-2-7	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# PORT 67, DIS# 7177-67) PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1128-3-35	62,500 Kbtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 54, DIS# 43010-74) WITH SO2 SCRUBBER - APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1128-4-35	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #50 DIS# 43009-74 WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-5-38	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	69 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #51 DIS# 41752-08 WITH NORTH AMERICAN GLE LOW-NOX BURNER, FGR, BLOWER MOTOR AND VARIABLE SPEED DRIVE APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-6-20	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-1-26C, DIS# 43011-74) WITH SO2 SCRUBBER
S-1128-7-5	8.4 MMBtu/hr boiler	3020-02 G	1	980.00	980.00	D	8.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS LOCOMOTIVE BOILER #1
S-1128-8-5	8.4 MMBtu/hr boiler	3020-02 G	1	980.00	980.00	D	8.4 MMBTU/HR NATURAL GAS FIRED CLEAVER BROOKS LOCOMOTIVE BOILER #2
S-1128-9-0	4,200,000 BTU/HR	3020-02 F	1	731.00	731.00	D	4.2 MMBTU/HR OIL FIRED KEWANEE LOCOMOTIVE BOILER #8
S-1128-10-15	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 50-1-1F, DIS# 43001-78)
S-1128-11-21	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-2-26C, DIS# 43015-78) WITH SO2 SCRUBBER
S-1128-14-5	27,500,000 Btu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-1
S-1128-15-41	62,500 kBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-1-2F (DIS# 43002-81) WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER
S-1128-16-31	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-2 DIS # 43003-81 WITH FGR
S-1128-17-33	62,500,000 Btu/hr	3020-02 H	1	1,238.00	1,238.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-3 DIS# 43004-81 WITH FGR

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-18-38	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-4-2F WITH SO2 SCRUBBER AND NORTH AMERICAN GLE MAGNA-FLAME ULTRA-LOW NOX BURNER - TAFT (GROUP II)
S-1128-19-32	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#50-5 DIS #43006-81) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR
S-1128-21-43	69.0 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 90, DIS# 43010-80) WITH NORTH AMERICAN GLE LOW-NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-22-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25,200,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-1
S-1128-23-13	27,500 Kbtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-2
S-1128-24-34	62,500 Kbtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 61, DIS# 43001-79) WITH SO2 SCRUBBER
S-1128-25-47	69 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 62, DIS# 41764-06) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-26-43	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 63, DIS# 43003-79) WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-27-33	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #53 DIS# 43010-78 WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-28-34	69.0 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	69.0 MMBTU/HR NATURAL/TEOR GAS-FIRED STEAM GENERATOR #52 DIS# 43014-78 WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-29-45	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 55, DIS# 41752-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, SHARED SO2 SCRUBBER WITH S-1128-30, -31, -32, -33, AND -34 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST
S-1128-30-45	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 56, DIS # 41753-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST
S-1128-31-43	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 57, DIS# 41763-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-32-45	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 58, DIS# 41751-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC) AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST
S-1128-33-50	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 59, DIS# 41758-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST
S-1128-34-48	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 60, DIS# 41759-06) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, WITH EXHAUST VENTED TO SHARED SO2 SCRUBBER LISTED ON S-1128-29 (CYMRIC), AND BRINKS MIST ELIMINATOR SYSTEM ON SCRUBBER EXHAUST
S-1128-35-39	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 89) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER AND FGR
S-1128-36-31	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND WITH SO2 SCRUBBER WITH FGR (CUSA ID #50-3-26C)
S-1128-38-35	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (#94)
S-1128-40-8	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 29, DIS# 43007-71) PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1128-41-7	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 31, DIS# 43023-66)
S-1128-42-8	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 28, DIS# 43001-71)
S-1128-43-7	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA #32, DIS# 43117-66)
S-1128-44-5	27,500 KBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-3
S-1128-45-7	27,500 KBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-4
S-1128-46-6	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 26, DIS# 43104-66)
S-1128-47-2	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25,200,000 BTU/HR STEAM GENERATOR

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-48-35	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-4-26C) EQUIPPED WITH A NORTH AMERICAN MAGNAFLAME GLE ULTRA-LOW NOX BURNER WITH SO2 SCRUBBER WITH FGR
S-1128-56-21	62,500 KBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 50-5-26C, DIS# 43303-80) WITH SO2 SCRUBBER
S-1128-57-23	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 LOW NOX BURNER WITH FGR (#50-6 DIS #43012-81)
S-1128-58-25	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #50-7 DIS# 43013-81 WITH FGR AND NORTH AMERICAN GLE ULTRA-LOW NOX BURNER
S-1128-61-7	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27,500,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-2
S-1128-63-1	18,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25,200,000 BTU/HR STEAM GENERATOR
S-1128-64-18	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 80, DIS# 26765-77)
S-1128-65-17	62.5 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID #81, DIS# 26766-77)
S-1128-66-31	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 82, DIS# 26753-80) WITH FGR, VARIABLE FREQUENCY DRIVE FOR BLOWER MOTOR, AND O2 ANALYZER FOR FGR CONTROL
S-1128-68-23	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 76, DIS# 43016-82) NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR, VARIABLE FREQUENCY DRIVE, AND O2 CONTROLLER - CYMRIC
S-1128-75-26	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 91, DIS# 43001-85) WITH NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-76-27	69 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	69 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 93, DIS# 41751-09) WITH A NORTH AMERICAN GLE MAGNA-FLAME LOW-NOX BURNER, FGR, VARIABLE FREQUENCY DRIVE, AND O2 ANALYZER APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-77-25	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (CUSA ID# 92, DIS# 43003-85) WITH A NORTH AMERICAN MODEL MAGNA FLAME GLE-4231 LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-78-7	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 50-8-26C)

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-79-21	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #95 (DIS#43007-85) EQUIPPED WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-80-23	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 96) WITH FGR - APPROVED FOR VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD
S-1128-81-2	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR
S-1128-84-18	30 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 30 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 11, DIS# 27551-77) PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1128-85-8	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 22-1-25A, DIS# 27551-78)
S-1128-87-6	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR OIL/NATURAL GAS FIRED STEAM GENERATOR DIS# 27119-77 WITH SO2 SCRUBBER
S-1128-89-9	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR OIL/NATURAL GAS FIRED STEAM GENERATOR WITH SO2 SCRUBBER
S-1128-91-11	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 22-1-21K, DIS# 27550-66)
S-1128-103-0	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30,000,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 1
S-1128-106-0	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30,000,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 3
S-1128-111-23	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 72) WITH A NORTH AMERICAN MODEL #4231 G-LE MAGNA FLAME LOW-NOX BURNER WITH VARIABLE FREQUENCY DRIVE FOR THE BLOWER MOTOR, FGR, AN O2 ANALYZER FOR FGR CONTROL, AND APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-112-26	69.0 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR (CUSA ID# 73) APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-113-24	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 97) WITH A NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR - APPROVED FOR VARIOUS SPECIFIED LOCATIONS IN THE CYMRIC OILFIELD
S-1128-114-6	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 50-12-26C)

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-116-68	146 wells	3020-09 A	146	11.23	1,639.58	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-36W #1 SERVING 146 STEAM ENHANCED WELLS INCLUDING SIX AUTOMATIC WELL TEST STATIONS AND GAS PIPING TO SCRUBBED STEAM GENERATORS, SEPARATOR VESSEL FV-3A, DOGGR APPROVED DISPOSAL WELL(S), AND 460 MMBTU/HR JOHN ZINK MODEL #EEF-LHLS-24 AIR ASSISTED EMERGENCY FLARE
S-1128-117-6	WELLS	3020-09 A	62	11.23	696.26	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM #16-Z SERVING 62 STEAM DRIVE WELLS
S-1128-118-25	628 wells with vapor recovery	3020-09 A	628	11.23	7,052.44	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 628 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES
S-1128-124-11	38 WELLS	3020-09 A	38	11.23	426.74	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM #36-CC-1 SERVING 38 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, VAPOR COMPRESSOR, AND VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES
S-1128-125-25	253 wells	3020-09 A	253	11.23	2,841.19	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 253 STEAM ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, VAPOR COMPRESSORS, AND VAPOR PIPING TO STEAM GENERATORS S-1128-15, S-1128-18, AND VAPOR PIPING TIED INTO VAPOR RECOVERY LINE FROM SYSTEM LISTED UNDER PERMIT S-1128-617
S-1128-128-23	60 wells with vapor recovery	3020-09 A	60	11.23	673.80	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-31X SERVING 60 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S), VAPOR COMPRESSOR(S), AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S)
S-1128-129-4	WELLS	3020-09 A	40	11.23	449.20	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM #9-Z SERVING 40 STEAM DRIVE WELLS - CANCELED 3/1/95 LMS
S-1128-130-22	146 wells with vapor recovery	3020-09 A	146	11.23	1,639.58	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WVVC SYSTEM CC-36W #2 SERVING 146 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S, DOGGR APPROVED DISPOSAL WELL(S), OR 5 AUTOMATIC WELL TEST VESSELS - CYMRIC
S-1128-143-1	WELLS	3020-09 A	80	11.23	898.40	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 80 STEAM DRIVE WELLS

Detailed Facility Report

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-144-17	33 wells with vapor recovery	3020-09 A	33	11.23	370.59	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-5Z/6Z SERVING 33 STEAM-ENHANCED WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, AND PIPING TO SCRUBBED SG'S OR DOGGR APPROVED DISPOSAL WELL(S) - CYMRIC
S-1128-145-1	20 WELLS	3020-09 A	20	11.23	224.60	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 20 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES.
S-1128-146-0	WELLS	3020-09 A	70	11.23	786.10	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-26C-3 SERVING 70 STEAM DRIVE WELLS
S-1128-148-3	86 WELLS	3020-09 A	86	11.23	965.78	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 86 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES.
S-1128-154-32	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL/PRODUCED GAS FIRED STEAM GENERATOR (CUSA ID #14) WITH NORTH AMERICAN 4231 G-LE MAGNA FLAME LOW NOX BURNER WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-155-5	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 25, DIS# 4500-80)
S-1128-156-10	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID #24, DIS# 45224-80)
S-1128-157-7	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 15, DIS# 45019-82)
S-1128-158-8	62,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 21, DIS# 45006-80)
S-1128-159-24	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR (CUSA ID# 18-A)
S-1128-160-8	34 WELLS	3020-09 A	34	11.23	381.82	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 16 STEAM DRIVE WELLS AND 18 CYCLIC WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES
S-1128-161-11	65 VAPOR CONTROLLED WELLS	3020-09 A	65	11.23	729.95	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 65 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-162-8	40 WELLS	3020-09 A	40	11.23	449.20	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING 40 STEAM DRIVE WELLS, INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATOR, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO AUTHORIZED DISPOSAL/INCINERATION DEVICES
S-1128-175-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY - CANCELED 3/1/95 LMS
S-1128-177-3	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY
S-1128-179-0	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY ABANDONED - 11/18/93 - TJG
S-1128-182-0	15 HP	3020-01 A	1	107.00	107.00	D	25 HP LOADOUT-CRUDE OIL
S-1128-183-17	138,600 GALLONS	3020-05 E	1	296.00	296.00	D	3,300 BBL FIXED ROOF PETROLEUM WASH TANK #T-1 WITH VAPOR CONTROL SYSTEM CONSISTING OF KNOCKOUT VESSEL(S), HEAT EXCHANGER(S), GAS/LIQUID SEPARATOR(S) AND VAPOR COMPRESSOR(S) SHARED WITH S-1128-230, '231, '232, '278, '605, '608 AND '609 DISCHARGING TO STEAM GENERATOR S-1128-15, '18 AND/OR TEOR S-1128-125
S-1128-185-0	420,000 GALLONS	3020-05 E	1	296.00	296.00	D	420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY
S-1128-192-3	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY
S-1128-195-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK W/VAPOR RECOVERY - CANCELED 3/1/95 LMS
S-1128-210-5	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (#12, CYMRIC OIL FIELD)
S-1128-222-15	210,000 gal	3020-05 E	1	296.00	296.00	D	5000 BBL FREE WATER KNOCK-OUT TANK #T-1 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-223-7	210,000 gal	3020-05 E	1	296.00	296.00	D	5000 BBL FREE WATER KNOCK-OUT TANK #T-2 VENTED TO VAPOR CONTROL SYSTEM SHARED WITH S-1128-222
S-1128-224-11	420,000 gal	3020-05 E	1	296.00	296.00	D	10,000 BBL WASH TANK #T-3 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-225-12	420,000 gal	3020-05 E	1	296.00	296.00	D	10,000 BBL WASH TANK #T-4 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-226-11	84,000 gal	3020-05 D	1	223.00	223.00	D	2000 BBL LACT TANK #T-5 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)

Detailed Facility Report

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-227-11	84,000 gal	3020-05 D	1	223.00	223.00	D	2000 BBL REJECT TANK #T-6 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-228-11	42,000 gallons	3020-05 C	1	165.00	165.00	D	1000 BBL REJECT TANK #T-8 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-229-13	15 hp	3020-01 A	1	107.00	107.00	D	WEMCO AIR FLOTATION UNIT #W-1 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-230-4	138,600 GALLONS	3020-05 E	1	296.00	296.00	D	3300 BBL FIXED ROOF PETROLEUM WASH TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2
S-1128-231-4	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	2000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2
S-1128-232-4	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	2000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-183-2
S-1128-233-8	275 HP	3020-01 E	1	495.00	495.00	D	CAHN 3 PLANT VAPOR CONTROL SYSTEM W/150 HP COMPRESSOR K-301, 125 HP STANDBY COMPRESSOR K-302, INLET SCRUBBER V-301, KNOCKOUT VESSEL K-301, AND GAS/LIQUID SEPARATOR V-201
S-1128-238-3	84,000 GALLON TANK	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF WASTEWATER TANK T-201 INCLUDING DEPURATORS, FREE WATER KNOCKOUT, AND BOTTOMS PUMP
S-1128-239-5	21,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF SLOP OIL TANK T-202 INCLUDING TWO PUMPS
S-1128-240-6	84,000 GAL	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF FILTERED WATER TANK T-203 WITH THREE WATER DISPOSAL
S-1128-241-4	42,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF DRAIN OVERFLOW TANK T-204 INCLUDING BOTTOMS PUMP
S-1128-245-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF STORAGE TANK WITH INTERNAL FLOATING ROOF - CANCELED 3/1/95 LMS
S-1128-248-46	277,200 gallon tank	3020-05 E	1	296.00	296.00	A	6,600 BBL FIXED ROOF CRUDE OIL TANK T-24 VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-250-11	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	5,000 BBL FIXED ROOF STORAGE TANK (T-41) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)
S-1128-253-9	21,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-58) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)
S-1128-255-7	42,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-51) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-257-9	10,500 GALLON TANK	3020-05 B	1	113.00	113.00	D	250 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-53) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)
S-1128-262-13	21,000 GALLON TANK	3020-05 C	1	165.00	165.00	A	500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-35) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-263-13	21,000 GALLON TANK	3020-05 C	1	165.00	165.00	A	500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-36) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-278-6	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	1,000 BBL FIXED ROOF SUMP REPLACEMENT TANK #T-154 WITH PRESSURE/VACUUM RELIEF VALVE
S-1128-297-4	100.5 hp electric motors	3020-01 D	1	379.00	379.00	D	WEMCO M-1 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP
S-1128-298-4	100.5 hp electric motors	3020-01 D	1	379.00	379.00	D	WEMCO M-2 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP
S-1128-300-8	3,820 GALLON TANK	3020-05 A	1	91.00	91.00	D	91 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-55) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)
S-1128-302-4	8.4 MMBtu/hr boiler	3020-02 G	1	980.00	980.00	D	8.4 MMBTU/HR NATURAL GAS-FIRED BOILER #3 WITH A CLEAVER BROOKS MODEL ICH84GX30S LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM
S-1128-303-5	5.23 MMBtu/hr boiler	3020-02 G	1	980.00	980.00	D	5.23 MMBTU/HR NATURAL GAS FIRED CLEAVER-BROOKS BOILER #F-2 WITH A CLEAVER BROOKS MODEL CB-700X-125-15 BURNER AND FGR
S-1128-304-4	5.23 MMBTU/HR BOILER	3020-02 G	1	980.00	980.00	D	5.23 MMBTU/HR NATURAL GAS FIRED BOILER #F-1
S-1128-305-6	375 bhp IC engine	3020-10 C	1	290.00	290.00	A	375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1128-306-7	600 bhp IC engine	3020-10 D	1	577.00	577.00	A	600 BHP CUMMINS MODEL KTA1965T DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1128-307-6	375 bhp IC engine	3020-10 C	1	290.00	290.00	A	375 BHP CATERPILLAR MODEL 3406DT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1128-308-0	187 BRAKE HP	3020-10 B	1	143.00	143.00	D	187 HP ROLINE NATURAL GAS FIRED I.C. ENGINE (SURRENDERED PURSUANT TO RULE 4701 CONTROL PLAN 5/28/99 - SPL)
S-1128-312-0	108 BRAKE HP	3020-10 B	1	143.00	143.00	D	108 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE
S-1128-313-0	56 BRAKE HP	3020-10 A	1	98.00	98.00	D	56 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 386 - CANCELLED PER 11/8/93 LETTER - TJG
S-1128-314-0	56 BRAKE HP	3020-10 A	1	98.00	98.00	D	56 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 387 - CANCELLED PER 11/8/93 LETTER - TJG

Detailed Facility Report

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-317-0	63 BRAKE HP	3020-10 A	1	98.00	98.00	D	63 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 525 - CANCELED 3/1/95 LMS
S-1128-318-0	108 BRAKE HP	3020-10 B	1	143.00	143.00	D	108 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 331X - CANCELED 3/1/95 LMS
S-1128-320-0	63 BRAKE HP	3020-10 A	1	98.00	98.00	D	63 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SNP202B
S-1128-321-0	56 BRAKE HP	3020-10 A	1	98.00	98.00	D	56 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 477 - ELECTRIFIED - TJG 11/93
S-1128-326-0	108 BRAKE HP	3020-10 B	1	143.00	143.00	D	108 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 513 - CANCELED 3/1/95 LMS
S-1128-331-0	183 BRAKE HP	3020-10 B	1	143.00	143.00	D	183 HP ROLINE NATURAL GAS FIRED I.C. ENGINE - ABANDONED - 11/30/93 - TJG
S-1128-332-0	88 BRAKE HP	3020-10 A	1	98.00	98.00	D	88 HP M & M NATURAL GAS FIRED I.C. ENGINE
S-1128-333-0	108 BRAKE HP	3020-10 B	1	143.00	143.00	D	108 HP WAUKESHA NATURAL GAS FIRED I.C. ENGINE, SN 1- CANCELED 3/1/95 LMS
S-1128-335-6	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27,500,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-6
S-1128-336-6	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27,500,000 BTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 22-7
S-1128-337-10	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #22-5-26C WITH LOW PRESSURE FUEL INDUCED RECIRCULATION (LPFIR) - TAFT (GROUP II)
S-1128-339-0	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 16
S-1128-340-3	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 20) PERMITTED TO OPERATE AT VARIOUS LOCATIONS
S-1128-341-4	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #22 (VARIOUS SPECIFIED LOCATIONS)
S-1128-342-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS STEAM STEAM GENERATOR, SN 27
S-1128-343-7	32,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	32 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 30; UNIT AUTHORIZED TO OPERATE AT MULTIPLE LOCATIONS: SEC 7, T30S, R22E; SEC 17, T30S, R22E; AND NW 1/4 SEC 01, T11N, R24W.
S-1128-344-2	32,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	32 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 33
S-1128-345-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 34
S-1128-346-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SN 35) APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1128-347-2	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 37

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-348-1	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 38
S-1128-349-1	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 39
S-1128-350-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 40
S-1128-351-2	27,500,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	27.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 41
S-1128-352-8	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #42 WITH LOW PRESSURE FUEL INDUCED RECIRCULATION (LPFIR), (GROUP II) - CYMRIC
S-1128-353-2	30,000,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 43
S-1128-354-0	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 44
S-1128-355-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 45
S-1128-356-2	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 46
S-1128-357-0	25,200,000 BTU/HR	3020-02 H	1	1,238.00	1,238.00	D	25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, SN 47
S-1128-360-9	24.0 MMBtu/hr boiler	3020-02 H	1	1,238.00	1,238.00	D	24 MMBTU/HR BOILER C-139 WITH FLUE GAS RECIRCULATION (FGR) - CYMRIC
S-1128-361-8	24.0 MMBtu/hr boiler	3020-02 H	1	1,238.00	1,238.00	D	24 MMBTU/HR BOILER C-140 WITH FLUE GAS RECIRCULATION (FGR) - CYMRIC
S-1128-363-0	14,960 GALLONS	3020-05 B	1	113.00	113.00	D	SOAD ASH PNEUMATIC RECEIVING AND STORAGE OPERATION INCLUDING 2000 CU. FT. SILO WITH B.V. SERIES FABRIC FILTER MODEL 58-BVB-16 WITH PULSE-JET CLEANING AND MIXING TANK
S-1128-364-1	14,960 GALLONS	3020-05 B	1	113.00	113.00	D	SODA ASH PNEUMATIC RECEIVING AND STORAGE OPERATION INCLUDING 2000 CU. FT. SILO WITH FLEX-KLEEN MODEL 58-BVB-16 BIN VENT FILTER WITH PULSE JET CLEANING, ENCLOSED AUGER TO CONVEY SILO CONTENTS TO MIXING TANK
S-1128-366-21	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 26C CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-367-20	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 26C CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

Detailed Facility Report

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-368-20	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 26C CG-3) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-369-20	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 26C CG-4) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-370-23	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 36W CG-1) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-371-23	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 36W CG-2) INCLUDING: SOLAR CENTAUR 37.6 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE WITH A PCL HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-372-22	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 36W CG-3) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2
S-1128-373-22	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 36W CG-4) INCLUDING 37.6 MMBTU/HR (NOMINAL RATING) SOLAR CENTAUR GAS TURBINE ENGINE WITH WATER INJECTION AND ONE HEAT RECOVERY STEAM GENERATOR WITH A 37 MMBTU/HR DUCT BURNER (NOMINAL RATING) WITH AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION (SCR), AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) FOR NOX, CO AND O2
S-1128-374-16	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 31X CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

Detailed Facility Report

For Facility=1128

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-375-16	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 31X CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) DUCT BURNER SERVED BY SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
S-1128-376-15	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-1) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)
S-1128-377-15	2,700 kW	3020-08A C	1	1,840.00	1,840.00	A	2.7 MW COGEN FACILITY (CUSA ID# 6Z CG-2) INCLUDING: SOLAR CENTAUR 40.9 MMBTU/HR (NOMINAL RATING), WATER INJECTED, GAS TURBINE ENGINE AND STRUTHERS HEAT RECOVERY STEAM GENERATOR WITH 37 MMBTU/HR (NOMINAL RATING) COEN DUCT BURNER SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) WITH AMMONIA INJECTION SYSTEM, A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)
S-1128-385-64	770 wells with vapor recovery	3020-09 A	770	11.23	8,647.10	A	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WELL VENT VAPOR CONTROL SYSTEM #CC-1Y SERVING 770 STEAM ENHANCED WELLS INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, GAS FLOW AND TEMPERATURE INDICATORS, AUTOMATIC WELL TEST STATIONS, AND GAS PIPING TO SCRUBBED STEAM GENERATORS, OR DOGGR APPROVED DISPOSAL WELL(S)
S-1128-389-0	134 MISC.	3020-06	1	128.00	128.00	D	1 MISC. CYCLIC OIL WELLS
S-1128-390-11	797 Wells	3020-09 B	797	11.23	1,681.00	A	797 CYCLIC WELLS WITH CLOSED CASING VENTS
S-1128-391-2	10,500,000 BTU/HR	3020-02 G	1	980.00	980.00	D	10.5 MMBTU/HR NATURAL GAS FIRED BOILER #401
S-1128-392-2	10,500,000 BTU/HR	3020-02 G	1	980.00	980.00	D	10.5 MMBTU/HR NATURAL GAS FIRED BOILER #402
S-1128-396-10	30 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	DORMANT 30 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR DIS# 9157-67
S-1128-397-0	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON CONE BOTTOM DRAIN TANK - CANCELED 3/1/95 LMS
S-1128-398-0	63,000 GALLONS	3020-05 D	1	223.00	223.00	D	63,000 GALLON CONE BOTTOM PRODUCED WATER TANK - ABANDONED - 11/18/93 - TJG
S-1128-399-2	91 BBL TANK	3020-05 A	1	91.00	91.00	D	91 BBL FIXED ROOF PRODUCTION SPLITTER TANK T-10B AND 37 BBL GAS BOOT TANK T-10A WITH VAPOR CONTROL SHARED WITH S-1128-248 - CYMRIC 31X OCP
S-1128-400-12	420,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	10,000 BBL FIXED ROOF FWKO TANK (T-11) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 CYMRIC 31X OCP)

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-401-12	420,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	10,000 BBL FIXED ROOF FWKO TANK (T-12) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)
S-1128-402-14	15,000 GALLON TANK	3020-05 B	1	113.00	113.00	A	360 BBL FIXED ROOF CONSTANT LEVEL CRUDE OIL STORAGE TANK (T-19) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-403-2	91 BBL TANK	3020-05 A	1	91.00	91.00	D	91 BBL FIXED ROOF STORAGE TANK T-20 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP
S-1128-404-11	277,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	6,600 BBL FIXED ROOF WASH TANK (T-21) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-405-11	277,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	6,600 BBL FIXED ROOF WASH TANK (T-22) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)
S-1128-406-11	420,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	10,000 BBL FIXED ROOF WASH TANK (T-23) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019(CYMRIC 31X OCP)
S-1128-407-11	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-40) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-408-0	214,032 GALLONS	3020-05 E	1	296.00	296.00	D	214,032 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-409-9	214,326 GALLONS	3020-05 E	1	296.00	296.00	A	214,326 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-410-8	3,820 GALLON TANK	3020-05 A	1	91.00	91.00	D	91 BBL FIXED ROOF WATER SPLITTER TANK (T-30) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-248 (CYMRIC 31X OCP)
S-1128-411-12	277,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-31) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019 (CYMRIC 31X OCP)
S-1128-412-12	277,000 GALLON TANK	3020-05 E	1	296.00	296.00	A	6,600 BBL FIXED ROOF CRUDE OIL STORAGE TANK (T-32) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019 (CYMRIC 31X OCP)
S-1128-413-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-414-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-415-4	5,712 GALLONS	3020-05 B	1	113.00	113.00	D	5,712 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-416-6	7,602 GALLONS	3020-05 B	1	113.00	113.00	A	7,602 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-417-3	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-418-3	11,424 GALLONS	3020-05 B	1	113.00	113.00	D	11,424 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-419-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELLED - 11/30/93 - TJG

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-420-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELLED - 11/30/93 - TJG
S-1128-421-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-422-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-423-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-424-3	82,320 GALLONS	3020-05 D	1	223.00	223.00	D	82,320 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-425-4	11,000 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF DRAIN TANK TS #5
S-1128-426-4	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF DRAIN TANK TS #7
S-1128-427-4	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF DRAIN TANK TS #6
S-1128-428-6	11,004 GALLONS	3020-05 B	1	113.00	113.00	A	11,004 GALLON FIXED DRAIN TANK TS #4
S-1128-429-3	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF DRAIN TANK TS #3
S-1128-430-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-431-4	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-432-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-433-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-434-3	45,864 GALLONS	3020-05 C	1	165.00	165.00	D	45,864 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-435-4	211,596 GALLONS	3020-05 E	1	296.00	296.00	D	211,596 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-436-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK (CANCELED BY PERMITTEE AT RENEWAL BILLING, TEG - 3/19/98)
S-1128-437-4	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED GUAGE TANK GS #2
S-1128-438-6	4,746 GALLONS	3020-05 A	1	91.00	91.00	A	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-440-3	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED DRAIN TANK GEN #42
S-1128-441-0	32,970 GALLONS	3020-05 C	1	165.00	165.00	D	32,970 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-442-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF TRANSFER TANK GS#4
S-1128-443-3	211,596 GALLONS	3020-05 E	1	296.00	296.00	D	311,596 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-444-1	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-445-0	6,762 GALLONS	3020-05 B	1	113.00	113.00	D	6,762 GALLON FIXED ROOF PETROLEUM STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-448-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-449-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-450-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-451-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-452-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-454-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED TRANSFER TANK TS #6
S-1128-455-4	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-456-4	33,600 GALLONS	3020-05 C	1	165.00	165.00	D	33,600 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-457-3	65,142 GALLONS	3020-05 D	1	223.00	223.00	D	65,142 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-458-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-459-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-460-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-461-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-462-1	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-463-3	167,748 GALLONS	3020-05 E	1	296.00	296.00	D	167,748 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-464-3	167,748 GALLONS	3020-05 E	1	296.00	296.00	D	167,748 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-465-3	335,454 GALLONS	3020-05 E	1	296.00	296.00	D	335,454 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-466-1	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-467-1	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-468-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-469-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK (CANCELED BY PERMITTEE AT RENEWAL BILLING, TEG - 3/19/98)
S-1128-470-0	21,714 GALLONS	3020-05 C	1	165.00	165.00	D	21,714 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-471-0	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-472-0	41,454 GALLONS	3020-05 C	1	165.00	165.00	D	41,454 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-477-3	65,142 GALLONS	3020-05 D	1	223.00	223.00	D	65,142 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-478-3	9,156 GALLONS	3020-05 B	1	113.00	113.00	D	9,156 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-479-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELLED - 11/30/93 - TJG
S-1128-480-0	77,910	3020-05 D	1	223.00	223.00	D	77,910 GALLON FIXED ROOF PROCESSING TANK - CANCELED 3/1/95 LMS
S-1128-483-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-484-3	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-485-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-487-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-490-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-491-0	65,142 GALLONS	3020-05 D	1	223.00	223.00	D	65,142 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-492-0	14,196 GALLONS	3020-05 B	1	113.00	113.00	D	14,196 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-493-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-494-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-495-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-496-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF CRUDE OIL STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-497-3	84,546 GALLONS	3020-05 D	1	223.00	223.00	D	84,546 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-498-3	84,546 GALLONS	3020-05 D	1	223.00	223.00	D	84,546 GALLON FIXED ROOF CRUDE OIL STORAGE TANK
S-1128-500-0	22,092 GALLONS	3020-05 C	1	165.00	165.00	D	20,092 GALLON FIXED ROOF STORAGE TANK
S-1128-518-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-522-0	65,142 GALLONS	3020-05 D	1	223.00	223.00	D	65,142 GALLON FIXED ROOF STORAGE TANK - CANCELLED - 11/30/93 - TJG

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-525-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK
S-1128-526-4	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK
S-1128-528-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1128-529-4	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF STORAGE TANK
S-1128-530-4	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK
S-1128-531-3	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK
S-1128-532-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-536-4	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF STORAGE TANK
S-1128-537-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK - ABANDONED - 11/18/93 - TJJ
S-1128-538-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-539-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK - ABANDONED - 11/18/93 - TJJ
S-1128-540-4	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,005 GALLON FIXED ROOF STORAGE TANK
S-1128-541-1	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF STORAGE TANK
S-1128-542-4	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF STORAGE TANK
S-1128-543-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-544-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-545-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK - ABANDONED - 11/18/93 - TJJ
S-1128-546-4	82,320 GALLONS	3020-05 D	1	223.00	223.00	D	82,320 GALLON FIXED ROOF STORAGE TANK
S-1128-547-0	82,320 GALLONS	3020-05 D	1	223.00	223.00	D	82,320 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-548-4	82,320 GALLONS	3020-05 D	1	223.00	223.00	D	82,320 GALLON FIXED ROOF STORAGE TANK
S-1128-549-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK
S-1128-550-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK
S-1128-551-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK
S-1128-552-0	4,746 GALLONS	3020-05 A	1	91.00	91.00	D	4,746 GALLON FIXED ROOF STORAGE TANK
S-1128-560-1	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK
S-1128-561-0	124,740 GALLONS	3020-05 E	1	296.00	296.00	D	124,740 GALLON FIXED ROOF STORAGE TANK - CANCELLED - 11/30/93 - TJJ

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-562-0	426,300 GALLONS	3020-05 E	1	296.00	296.00	D	426,300 GALLON FIXED ROOF STORAGE TANK - CANCELLED - 11/30/93 - TJG
S-1128-563-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-564-0	43,848 GALLONS	3020-05 C	1	165.00	165.00	D	43,848 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-567-0	22,008 GALLONS	3020-05 C	1	165.00	165.00	D	22,008 GALLON FIXED ROOF STORAGE TANK - ABANDONED - 11/18/93 - TJG
S-1128-568-0	43,428 GALLONS	3020-05 C	1	165.00	165.00	D	43,428 GALLON FIXED ROOF STORAGE TANK
S-1128-569-0	65,142 GALLONS	3020-05 D	1	223.00	223.00	D	65,142 GALLON FIXED ROOF STORAGE TANK
S-1128-572-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF PETROLEUM STOCK TANK TS NEMO
S-1128-573-3	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF SHIPPING TANK TS SS
S-1128-574-0	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON SHIPPING TANK TS SS - CANCELED 3/1/95 LMS
S-1128-576-0	11,004 GALLONS	3020-05 B	1	113.00	113.00	D	11,004 GALLON FIXED ROOF STORAGE TANK - SOLD - 11/18/93 - TJG
S-1128-581-0	124,740 GALLONS	3020-05 E	1	296.00	296.00	D	124,740 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-582-0	68,502 GALLONS	3020-05 D	1	223.00	223.00	D	68,502 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-583-0	68,502 GALLONS	3020-05 D	1	223.00	223.00	D	68,502 GALLON FIXED ROOF STORAGE TANK
S-1128-584-0	68,502 GALLONS	3020-05 D	1	223.00	223.00	D	68,502 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-585-0	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK
S-1128-586-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-587-0	37,590 GALLONS	3020-05 C	1	165.00	165.00	D	37,590 GALLON FIXED ROOF STORAGE TANK
S-1128-588-4	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-589-0	7,602 GALLONS	3020-05 B	1	113.00	113.00	D	7,602 GALLON FIXED ROOF STORAGE TANK
S-1128-590-0	15,204 GALLONS	3020-05 B	1	113.00	113.00	D	15,204 GALLON FIXED ROOF STORAGE TANK
S-1128-591-0	15,204 GALLONS	3020-05 B	1	113.00	113.00	D	15,204 GALLON FIXED ROOF STORAGE TANK
S-1128-592-0	37,590 GALLONS	3020-05 C	1	165.00	165.00	D	37,590 GALLON FIXED ROOF STORAGE TANK
S-1128-593-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-594-0	37,590 GALLONS	3020-05 C	1	165.00	165.00	D	37,590 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-595-0	37,590 GALLONS	3020-05 C	1	165.00	165.00	D	37,590 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-596-0	7,938 GALLONS	3020-05 B	1	113.00	113.00	D	7,938 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-597-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-598-0	4,704 GALLONS	3020-05 A	1	91.00	91.00	D	4,704 GALLON FIXED ROOF TANK - CANCELED 3/1/95 LMS
S-1128-599-0	6,762 GALLONS	3020-05 B	1	113.00	113.00	D	6,762 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-600-4	41,622 GALLONS	3020-05 C	1	165.00	165.00	D	41,622 GALLON FIXED ROOF STORAGE TANK
S-1128-601-0	10,584 GALLONS	3020-05 B	1	113.00	113.00	D	10,584 GALLON FIXED ROOF STORAGE TANK
S-1128-602-0	10,584 GALLONS	3020-05 B	1	113.00	113.00	D	10,584 GALLON FIXED ROOF STORAGE TANK
S-1128-603-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-604-0	10,584 GALLONS	3020-05 B	1	113.00	113.00	D	10,584 GALLON FIXED ROOF STORAGE TANK
S-1128-605-5	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	2,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK #T-5 WITH VAPOR CONTROL SYSTEM SHARED WITH TANK S-1128-183
S-1128-606-4	5,292 GALLONS	3020-05 B	1	113.00	113.00	D	5,292 GALLON FIXED ROOF STORAGE TANK
S-1128-607-4	56,952 GALLONS	3020-05 D	1	223.00	223.00	D	56,952 GALLON FIXED ROOF STORAGE TANK
S-1128-608-5	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	2,000 BBL FIXED ROOF WASTE WATER TANK #T-158B WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-183
S-1128-609-5	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	2,000 BBL FIXED ROOF WASTE WATER TANK #T-158A WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-183
S-1128-610-4	59,178 GALLONS	3020-05 D	1	223.00	223.00	D	59,178 GALLON FIXED ROOF STORAGE TANK
S-1128-611-0	10,584 GALLONS	3020-05 B	1	113.00	113.00	D	10,584 GALLON FIXED ROOF STORAGE TANK
S-1128-612-1	41,622 GALLONS	3020-05 C	1	165.00	165.00	D	41,622 GALLON FIXED ROOF STORAGE TANK
S-1128-613-0	7,938 GALLONS	3020-05 B	1	113.00	113.00	D	7,938 GALLON FIXED ROOF STORAGE TANK
S-1128-614-0	54,096 GALLONS	3020-05 D	1	223.00	223.00	D	54,096 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-615-0	27,048 GALLONS	3020-05 C	1	165.00	165.00	D	27,048 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-616-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-617-23	126,000 gallons	3020-05 E	1	296.00	296.00	D	3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618, -620, -622, -623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND/OR '18 VIA 31E BOOSTER STATION 2F GAS LINE (31E OCP) AND/OR FLARE S-1128-1004
S-1128-618-12	64,000 gallons	3020-05 D	1	223.00	223.00	D	2,000 BBL FIXED ROOF LACT TANK #T-4 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617
S-1128-619-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-620-6	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	503 BBL FIXED ROOF PETROLEUM SETTLING OR REJECT TANK #T-5 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-621-10	24,800 gallons	3020-05 C	1	165.00	165.00	D	775 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-7 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617
S-1128-622-11	105,600 gallons	3020-05 E	1	296.00	296.00	D	3,300 BBL FIXED ROOF PETROLEUM WASH TANK #T-2 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617
S-1128-623-11	126,840 gallons	3020-05 E	1	296.00	296.00	D	3,020 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-1 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617
S-1128-624-3	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-625-12	64,000 gallons	3020-05 D	1	223.00	223.00	D	2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-3 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANK S-1128-617
S-1128-626-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-627-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-628-0	30,450 GALLONS	3020-05 C	1	165.00	165.00	D	30,450 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-629-0	30,450 GALLONS	3020-05 C	1	165.00	165.00	D	30,450 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-630-0	20,286 GALLONS	3020-05 C	1	165.00	165.00	D	20,286 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-631-4	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-632-0	79,254 GALLONS	3020-05 D	1	223.00	223.00	D	79,254 GALLON FIXED ROOF STORAGE TANK
S-1128-633-4	68,502 GALLONS	3020-05 D	1	223.00	223.00	D	68,502 GALLON FIXED ROOF STORAGE TANK
S-1128-634-4	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-635-4	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-636-4	68,502 GALLONS	3020-05 D	1	223.00	223.00	D	68,502 GALLON FIXED ROOF STORAGE TANK
S-1128-637-4	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-638-4	9,408 GALLONS	3020-05 B	1	113.00	113.00	D	9,408 GALLON FIXED ROOF STORAGE TANK
S-1128-639-4	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-640-4	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-641-0	20,286 GALLONS	3020-05 C	1	165.00	165.00	D	20,286 GALLON FIXED ROOF STORAGE TANK
S-1128-645-0	137,382 GALLONS	3020-05 E	1	296.00	296.00	D	137,382 GALLON FIXED ROOF STORAGE TANK
S-1128-646-0	22,554 GALLONS	3020-05 C	1	165.00	165.00	D	22,554 GALLON FIXED ROOF STORAGE TANK
S-1128-647-1	5,880 GALLONS	3020-05 B	1	113.00	113.00	D	5,880 GALLON FIXED ROOF STORAGE TANK
S-1128-648-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-649-1	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-650-1	4,494 GALLONS	3020-05 A	1	91.00	91.00	D	4,494 GALLON FIXED ROOF STORAGE TANK
S-1128-651-1	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK
S-1128-652-1	31,710 GALLONS	3020-05 C	1	165.00	165.00	D	31,710 GALLON FIXED ROOF STORAGE TANK
S-1128-653-1	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK
S-1128-655-0	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK
S-1128-656-0	41,412 GALLONS	3020-05 C	1	165.00	165.00	D	41,412 GALLON FIXED ROOF STORAGE TANK
S-1128-680-0	67,830 GALLONS	3020-05 D	1	223.00	223.00	D	67,830 GALLON FIXED ROOF STORAGE TANK
S-1128-681-0	67,830 GALLONS	3020-05 D	1	223.00	223.00	D	67,830 GALLON FIXED ROOF STORAGE TANK
S-1128-682-0	67,830 GALLONS	3020-05 D	1	223.00	223.00	D	67,830 GALLON FIXED ROOF STORAGE TANK
S-1128-683-0	10,584 GALLONS	3020-05 B	1	113.00	113.00	D	10,584 GALLON FIXED ROOF STORAGE TANK
S-1128-688-0	5,880 GALLONS	3020-05 B	1	113.00	113.00	D	5,880 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-689-0	6,762 GALLONS	3020-05 B	1	113.00	113.00	D	6,762 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-690-4	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF STORAGE TANK
S-1128-691-4	67,242 GALLONS	3020-05 D	1	223.00	223.00	D	67,242 GALLON FIXED ROOF STORAGE TANK
S-1128-692-4	67,242 GALLONS	3020-05 D	1	223.00	223.00	D	67,242 GALLON FIXED ROOF STORAGE TANK
S-1128-693-4	22,344 GALLONS	3020-05 C	1	165.00	165.00	D	22,344 GALLON FIXED ROOF STORAGE TANK
S-1128-694-4	22,344 GALLONS	3020-05 C	1	165.00	165.00	D	22,344 GALLON FIXED ROOF STORAGE TANK
S-1128-695-4	21,822 GALLONS	3020-05 C	1	165.00	165.00	D	21,822 GALLON FIXED ROOF STORAGE TANK
S-1128-696-4	21,822 GALLONS	3020-05 C	1	165.00	165.00	D	21,822 GALLON FIXED ROOF STORAGE TANK
S-1128-697-1	6,048 GALLONS	3020-05 B	1	113.00	113.00	D	6,048 GALLON FIXED ROOF STORAGE TANK
S-1128-698-6	8,652 GALLONS	3020-05 B	1	113.00	113.00	D	8,652 GALLON FIXED ROOF STORAGE TANK
S-1128-699-6	43,764 GALLONS	3020-05 C	1	165.00	165.00	A	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-700-6	150,318 GALLONS	3020-05 E	1	296.00	296.00	D	150,318 GALLON FIXED ROOF STORAGE TANK
S-1128-701-15	75,138 gal	3020-05 D	1	223.00	223.00	D	1741 BBL FIXED ROOF STORAGE TANK WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C EFFLUENT PLANT)
S-1128-702-6	150,318 GALLONS	3020-05 E	1	296.00	296.00	D	150,318 GALLON FIXED ROOF STORAGE TANK
S-1128-703-14	42,294 gal	3020-05 C	1	165.00	165.00	D	1000 BBL FIXED ROOF STORAGE TANK WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C EFFLUENT PLANT)

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-704-6	124,740 GALLONS	3020-05 E	1	296.00	296.00	A	124,740 GALLON FIXED ROOF STORAGE TANK
S-1128-705-8	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF STORAGE TANK
S-1128-706-6	212,100 GALLONS	3020-05 E	1	296.00	296.00	A	212,100 GALLON FIXED ROOF STORAGE TANK
S-1128-707-8	83,160 GALLONS	3020-05 D	1	223.00	223.00	D	83,160 GALLON FIXED ROOF STORAGE TANK
S-1128-708-6	22,386 GALLONS	3020-05 C	1	165.00	165.00	A	22,386 GALLON FIXED ROOF STORAGE TANK
S-1128-709-6	43,764 GALLONS	3020-05 C	1	165.00	165.00	A	22,386 GALLON FIXED ROOF STORAGE TANK
S-1128-710-4	6,384 GALLONS	3020-05 B	1	113.00	113.00	D	6,384 GALLON FIXED ROOF STORAGE TANK
S-1128-711-0	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-712-0	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-713-6	22,344 GALLONS	3020-05 C	1	165.00	165.00	A	22,344 GALLON FIXED ROOF STORAGE TANK
S-1128-714-4	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-715-4	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-716-4	22,344 GALLONS	3020-05 C	1	165.00	165.00	D	22,344 GALLON FIXED ROOF STORAGE TANK
S-1128-717-6	21,882 GALLONS	3020-05 C	1	165.00	165.00	A	21,882 GALLON FIXED ROOF STORAGE TANK
S-1128-718-0	4,494 GALLONS	3020-05 A	1	91.00	91.00	D	4,494 GALLON FIXED ROOF STORAGE TANK - CANCELED 3/1/95 LMS
S-1128-729-1	4,242 GALLONS	3020-05 A	1	91.00	91.00	D	4,242 GALLON FIXED ROOF STORAGE TANK
S-1128-730-1	4,242 GALLONS	3020-05 A	1	91.00	91.00	D	4,242 GALLON FIXED ROOF STORAGE TANK
S-1128-731-1	20,706 GALLONS	3020-05 C	1	165.00	165.00	D	20,706 GALLON FIXED ROOF STORAGE TANK
S-1128-732-1	7,056 GALLONS	3020-05 B	1	113.00	113.00	D	7,056 GALLON FIXED ROOF STORAGE TANK
S-1128-733-1	79,002 GALLONS	3020-05 D	1	223.00	223.00	D	79,002 GALLON FIXED ROOF STORAGE TANK
S-1128-734-1	79,002 GALLONS	3020-05 D	1	223.00	223.00	D	79,002 GALLON FIXED ROOF STORAGE TANK
S-1128-735-1	6,762 GALLONS	3020-05 B	1	113.00	113.00	D	6,762 GALLON FIXED ROOF STORAGE TANK
S-1128-744-0	210,630 GALLONS	3020-05 E	1	296.00	296.00	D	210,630 GALLON FIXED ROOF STORAGE TANK
S-1128-746-1	83,580 GALLONS	3020-05 D	1	223.00	223.00	D	83,580 GALLON FIXED ROOF STORAGE TANK
S-1128-747-1	43,764 GALLONS	3020-05 C	1	165.00	165.00	D	43,764 GALLON FIXED ROOF STORAGE TANK
S-1128-748-1	83,580 GALLONS	3020-05 D	1	223.00	223.00	D	83,580 GALLON FIXED ROOF STORAGE TANK
S-1128-749-1	83,580 GALLONS	3020-05 D	1	223.00	223.00	D	83,580 GALLON FIXED ROOF STORAGE TANK
S-1128-750-1	22,344 GALLONS	3020-05 C	1	165.00	165.00	D	22,344 GALLON FIXED ROOF STORAGE TANK

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-752-0	21,126 GALLONS	3020-05 C	1	165.00	165.00	D	21,126 GALLON FIXED ROOF STORAGE TANK
S-1128-839-8	20 WELLS	3020-09 A	20	11.23	224.60	A	5 UNCONTROLLED CYCLIC WELLS
S-1128-870-1	42,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF TANK T-504, INCLUDING TWO DECANT PUMPS, WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-233
S-1128-871-1	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	D	210,000 GALLON FIXED ROOF TANK T-500 INCLUDING THREE OVERFLOW PUMPS, SHARED WITH VAPOR RECOVERY SYSTEM S-1128-233
S-1128-872-1	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	D	210,000 GALLON (5,000 BBL) WASTE WATER TANK #T-501 WITH GAS BLANKETING RELIEF VALVE CONNECTED TO VAPOR RECOVERY SYSTEM S-1128-233
S-1128-873-1	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	D	210,000 GALLON FIXED ROOF FILTERED WATER TANK T-502 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-233
S-1128-874-1	210,000 GALLON TANK	3020-05 E	1	296.00	296.00	D	210,000 GALLON FIXED ROOF FILTERED WATER TANK T-503 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-233
S-1128-875-1	42,000 GALLON TANK	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF FILTERED BACKWASH TANK T-505 INCLUDING TWO DECANT PUMPS, WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128 -233
S-1128-900-0	6,000,000 BTU/HR	3020-02 G	1	980.00	980.00	D	6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER
S-1128-901-0	6,000,000 BTU/HR	3020-02 G	1	980.00	980.00	D	6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER
S-1128-902-6	8,400 KBTU/HR HEATER	3020-02 G	1	980.00	980.00	D	DORMANT EMISSIONS UNIT: 8.4 MMBTU/HR NATURAL GAS FIRED HEATER TREATER
S-1128-903-2	6,000,000 BTU/HR	3020-02 G	1	980.00	980.00	D	6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER
S-1128-904-1	8,500 GALLONS	3020-05 B	1	113.00	113.00	D	8,500 GALLON FIXED ROOF FOAMER STORAGE TANK
S-1128-905-1	6,500 GALLONS	3020-05 B	1	113.00	113.00	D	6,500 GALLON FIXED ROOF HDPE STORAGE TANK
S-1128-906-1	1,050 GALLONS	3020-05 A	1	91.00	91.00	D	1,050 GALLON FIXED ROOF STORAGE TANK
S-1128-907-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF CRUDE OIL STORAGE TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-2010-46, 47, AND 48
S-1128-908-0	31,500 GALLONS	3020-05 C	1	165.00	165.00	D	49,999 GALLONS TANK BATTERY W/VAPOR CONTROL
S-1128-919-1	273,000 GALLON TANK	3020-05 E	1	296.00	296.00	D	6500 BBL (273,000 GALLON), 16 FOOT HIGH X 54 FOOT DIAMETER FIXED ROOF WASTE WATER TANK # T-201B WITH VAPOR CONTROL SHARED WITH S-1128-233
S-1128-920-16	25,200 KBTU/HR STEAM GENERATOR	3020-02 H	1	1,238.00	1,238.00	D	DORMANT EMISSIONS UNIT: 25.2 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (CUSA ID# 22-1-2F, DIS# 43112-66) WITH LOW PRESSURE FUEL INDUCED RECIRCULATION (LPFIR) - TAFT (GROUP II)
S-1128-921-9	158 Wells	3020-09 B	158	11.23	1,681.00	A	158 STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-923-12	84,000 gal	3020-05 D	1	223.00	223.00	D	2,000 BARREL DRAIN TANK, T-905C, WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-924-3	FIXED ROOF SURGE TANK	3020-05 G	1	461.00	461.00	D	1,218,000 GALLON FIXED ROOF WASTE WATER SURGE TANK #T-205 ATTACHED TO VAPOR RECOVERY SYSTEM (S-1128-233).
S-1128-925-3	FIXED ROOF SKIM TANK	3020-05 E	1	296.00	296.00	D	399,000 GALLON FIXED ROOF WASTE WATER SKIM TANK #T-206 ATTACHED TO VAPOR RECOVERY SYSTEM (S-1128-233).
S-1128-926-1	FIXED ROOF RAW WATER TANK	3020-05 D	1	223.00	223.00	D	ONE 71,400 GALLON FIXED ROOF RAW WATER TANK #T-207A AND 2 WEMCO FLOTATION CELLS (M-203A & M-203B) ATTACHED TO VAPOR RECOVERY SYSTEM (S-1128-233). EXISTING 60 HP PUMPS P-207 A/B/C (FORMERLY P-201 A/B/C) WILL SERVICE THIS TANK.
S-1128-927-1	30 MM BTU/HR STEAM GEN	3020-02 H	1	1,238.00	1,238.00	D	30.0 MMBTU/HR STRUTHERS NATURAL GAS FIRED STEAM GENERATOR (S/N 75/76-37153-2) EQUIPPED WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, AND O2 CONTROLLER
S-1128-933-4	409 HP	3020-10 D	1	577.00	577.00	D	409 HP WAUKESHA NATURAL GAS FIRED IC ENGINE SERVING A NATURAL GAS COMPRESSOR
S-1128-934-15	4.98 MMBtu/hr	3020-02 F	1	731.00	731.00	A	14.8 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS
S-1128-935-13	426,500 GALLON TANK	3020-05 E	1	296.00	296.00	A	10,156 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-13) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-936-13	507,500 GALLON TANK	3020-05 F	1	362.00	362.00	A	12,086 BBL FIXED ROOF CONSTANT LEVEL FWKO TANK (T-25) VENTED TO VAPOR RECOVERY SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-938-10	15,960 GALLON TANK	3020-05 B	1	113.00	113.00	A	380 BBL CONSTANT LEVEL CRUDE OIL SURGE TANK (T-18) VENTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1128-1019 (CYMRIC 31X OCP)
S-1128-940-4	16,000 gal storage at a "Large Producer"	3020-05 B	1	113.00	113.00	D	16,000 GALLON WEMCO M-3 TANK WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 - CYMRIC 31X OCP
S-1128-941-11	62.5 MMBtu/hr steam generator	3020-02 H	1	1,238.00	1,238.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER WITH FGR
S-1128-949-5	470 bhp IC engine	3020-10 D	1	577.00	577.00	A	470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1128-950-3	50,000 to 100,000 gallons	3020-05 D	1	223.00	223.00	A	UP TO 14' O.D. X 61' (1670 BBL) CRUDE OIL INLET GAS SEPARATOR VESSEL V-2A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019
S-1128-951-5	470 bhp IC engine	3020-10 D	1	577.00	577.00	A	470 BHP CUMMINS MODEL QSM11-G2 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

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Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-952-9	Billed under S-2010-200	999-99	1	0.00	0.00	A	30.0 MMBTU/HR NATURAL GAS, PROPANE, OR BUTANE-FIRED STRUTHERS STEAM GENERATOR S/N 75/76-37153-2 WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (ALSO PERMITTED AS S-2010-200 IN LOW SS)
S-1128-954-5	252,000 gallon storage tank	3020-05 E	1	296.00	296.00	D	6000 BBL OR LESS FIXED ROOF CRUDE OIL TANK SERVED BY THE VAPOR RECOVERY SYSTEM LISTED ON TANK S-1128-617
S-1128-955-1	225 bhp IC engine	3020-10 C	1	290.00	290.00	D	225 BHP CATERPILLAR MODEL C7 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE SERVED BY A AZ PURIFIER OXIDATION CATALYST WITH CLOSED CRANKCASE VENTILATION (CCV) SYSTEM POWERING A WATER PUMP
S-1128-956-1	225 bhp IC engine	3020-10 C	1	290.00	290.00	D	225 BHP CATERPILLAR MODEL C7 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE SERVED BY A AZ PURIFIER OXIDATION CATALYST WITH CLOSED CRANKCASE VENTILATION (CCV) SYSTEM POWERING A WATER PUMP
S-1128-957-3	470 bhp IC engine	3020-10 D	1	577.00	577.00	A	470 BHP CUMMINS, MODEL QSM11-G4, DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 300 KW ELECTRICAL GENERATOR
S-1128-958-1	15,000 gallon	3020-05 B	1	113.00	113.00	D	15,000 GALLON WEMCO M-4 WITH VAPOR CONTROL SYSTEM SHARED WITH S-1128-248 (CYMRIC 31X OCP)
S-1128-959-3	85 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-960-3	85 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-961-3	85 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY WITH FGR APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1128-974-5	21,000 gallons	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)
S-1128-975-5	21,000 gallons	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)
S-1128-976-5	21,000 gallons	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

Detailed Facility Report

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-977-5	21,000 gallons	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE HEAVY OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)
S-1128-978-3	250 hp	3020-10 C	1	290.00	290.00	A	250 HORSEPOWER CUMMINS MODEL QSB7-G3 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (31X CONTROL ROOM, CYMRIC OILFIELD)
S-1128-979-2	470 hp	3020-10 D	1	577.00	577.00	A	470 HP CUMMINS MODEL QSM11-G4 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #4, CYMRIC OILFIELD)
S-1128-980-2	755 Horsepower	3020-10 D	1	577.00	577.00	A	755 HP CUMMINS MODEL QSX15-G9-NR2 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (COOLING STATION #5, CYMRIC OILFIELD)
S-1128-981-5	100 TEO Wells	3020-09 A	100	11.23	1,123.00	A	TEOR OPERATION WITH UP TO 100 WELLS, INCLUDING OPEN OR CLOSED CASING VENTS, WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, WITH THE VAPORS PIPED TO THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617 AND/OR FLARE S-1128-1004
S-1128-986-2	10,500 gallon (250 bbl) storage tank	3020-05 B	1	113.00	113.00	A	10,500 GALLON (250 BBL) OPEN TOP PETROLEUM STORAGE TANK
S-1128-988-1	4.98 MMBtu/hr	3020-02 F	1	731.00	731.00	D	4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS OR LPG PILOT INCINERATING PRODUCED GAS USED AS A TEMPORARY REPLACEMENT EMISSIONS UNIT (TREU) FOR S-1128-934
S-1128-989-10	100-200 hp	3020-01 D	1	379.00	379.00	A	26 C OIL CLEANING PLANT VAPOR CONTROL SERVING TANKS S-1128-229, '-701, '-703, '-923, AND '-1015 INCLUDING 561,000 BTU/HR HEAT EXCHANGER, KNOCKOUT VESSEL, COMPRESSOR, AND COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1128-36, '-48, S-1141-555, '-556, AND '-557, FLARE S-1141-513, AND APPROVED INJECTION WELL(S)
S-1128-990-0	28.8 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	D	28.8 MMBTU/HR HURST MODEL 52-XID-650-250 NATURAL GAS-FIRED BOILER WITH AN ALZETA MODEL CSB 272R LOW NOX BURNER USED AS A TEMPORARY REPLACEMENT EMISSIONS UNIT (TREU) FOR S-1128-360 AND -361 (31X OIL CLEANING PLANT)
S-1128-991-5	21,000 gal	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE
S-1128-992-5	21,000 gal	3020-05 C	1	165.00	165.00	A	UP TO 500 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE
S-1128-993-2	up to 126,000 gallon tank	3020-05 E	1	296.00	296.00	A	2,076 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (26C FWKO)
S-1128-994-2	up to 126,000 gallon tank	3020-05 E	1	296.00	296.00	A	1,600 BBL FREE WATER KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '-556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '-48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-995-2	up to 126,000 gallon tank	3020-05 E	1	296.00	296.00	A	1,600 BBL FREE WATER KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-118 (26C OCP), STEAM GENERATORS S-1141-555, AND '-556 (17S STEAM PLANT), STEAM GENERATORS S-1128-36, AND '-48 (26C STEAM PLANT), FLARE LISTED S-513 (STATION 1-09 FLARE), OR GAS DISPOSAL WELLS
S-1128-996-1	up to 21,000 gallon tank	3020-05 C	1	165.00	165.00	A	150 BBL EMERGENCY USE VESSEL (V-120) (26C FWKO)
S-1128-997-2	up to 42,000 gallons	3020-05 C	1	165.00	165.00	A	469 BBL FIXED ROOF TANK (T-100) WITH NATURAL GAS BLANKETING (31E FWKO)
S-1128-998-1	up to 42,000 gallon tank	3020-05 C	1	165.00	165.00	A	700 BBL GAS KNOCKOUT VESSEL (V-100) WITH VAPOR CONTROL SYSTEM CONSISTING OF MISC. VAPOR CONTROL EQUIPMENT AND VENTED TO STEAM GENERATORS S-1128-15 AND '-18 (31E FWKO)
S-1128-1000-1	up to 126,000 gallon tank	3020-05 E	1	296.00	296.00	A	1,600 BBL GAS KNOCKOUT VESSEL (V-100) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)
S-1128-1001-1	up to 126,000 gallon tank	3020-05 E	1	296.00	296.00	A	1,600 BBL GAS KNOCKOUT VESSEL (V-110) VENTING TO THE VAPOR CONTROL SYSTEM LISTED ON S-1128-125 OR TO BYPASS PIPING VENTING TO 2F STEAM PLANT (2F FWKO)
S-1128-1004-3	25 MMBtu/hr Flare	3020-02 H	1	1,238.00	1,238.00	A	25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-2010-317) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S HEAVY OIL WESTERN STATIONARY SOURCE
S-1128-1014-2	420,000	3020-05 E	1	296.00	296.00	A	10,000 BBL CRUDE OIL STORAGE TANK (T-33) CONNECTED TO TANK '-1019 VAPOR CONTROL SYSTEM (31X OCP)
S-1128-1015-4	380 bbl	3020-05 B	1	113.00	113.00	A	380 BBL WEMCO AIR FLOATATION UNIT #M-901 WITH PUC QUALITY GAS BLANKETING, VENTED TO VAPOR CONTROL SYSTEM S-1128-989 (26C OIL CLEANING PLANT)
S-1128-1018-2	84,000 gallons	3020-05 D	1	223.00	223.00	A	2000 BBL DRAIN TANK WITH NATURAL GAS BLANKETING (2F OCP)
S-1128-1019-3	399 HP	3020-01 E	1	495.00	495.00	A	CYMRIC 31X OIL CLEANING PLANT VAPOR CONTROL SYSTEM SHARED WITH 22 PERMIT UNITS; INCLUDING HEAT EXCHANGER(S), G/L SEPARATORS, GAS COMPRESSORS, & GAS PIPING TO EITHER TEOR PERMIT S-1128-116 COLLECTION SYSTEM, SCRUBBED STEAM GENERATORS S-1128-3, -24, -25, -26, AND -29 THROUGH -34, OR DOGGR APPROVED DISPOSAL WELLS
S-1128-1020-1	420,000 gallons	3020-05 E	1	296.00	296.00	A	10,000 BBL FIXED-ROOF WASH TANK (T-27) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1019
S-1128-1023-1	25.2 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	A	25.2 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #60; DIS# 20754-66) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FGR - DERBY ACRES LEASE
S-1128-1024-1	420,000 gallons	3020-05 E	1	296.00	296.00	A	10,000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM5 STA. L

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1128-1025-1	46,620 gallons	3020-05 C	1	165.00	165.00	A	1110 BBL GAS/LIQUID SEPARATOR VESSEL V-100 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE
S-1128-1026-1	38,052 gallons	3020-05 C	1	165.00	165.00	A	906 BBL GAS/LIQUID SEPARATOR VESSEL V-200 VENTED TO MCKITTRICK STEAM GENERATORS, SOUR GAS STEAM INJECTION WELLS, OR 31X FLARE
S-1128-1027-1	49,980 gallons	3020-05 C	1	165.00	165.00	A	1190 BBL (12.5 FT DIA X 50 FT) HEAVY CRUDE OIL WET LACT SEPARATOR VESSEL AND ASSOCIATED PIPING AND COMPONENTS, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1128-1022
S-1128-1028-1	5.285 MW	3020-08A D	1	3,674.00	3,674.00	A	5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #1 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O2; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O2 CONCENTRATIONS
S-1128-1029-1	5.285 MW	3020-08A D	1	3,674.00	3,674.00	A	5.285 MW (NOMINAL RATING) GAS TURBINE ENGINE COGENERATION UNIT #2 (MCKITTRICK) EQUIPPED WITH: 63 MMBTU/HR (NOMINAL) SOLAR TAURUS 60-7901 GAS TURBINE ENGINE (GTE); HEAT RECOVERY STEAM GENERATOR (HRSG) WITH A 40 MMBTU/HR (NOMINAL) DUCT BURNER; WATER INJECTION SYSTEM FOR INTERMEDIATE NOX CONTROL; SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION TO COMPLY WITH RULE 4703 TIER 3 EMISSION LIMIT OF 5 PPMV NOX @ 15% O2; OXIDATION CATALYST FOR CO CONTROL; AND SHARED CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) TO MEASURE NOX, CO, AND O2 CONCENTRATIONS

Number of Facilities Reported: 1