



November 18, 2021

Mr. Lance Ericksen Chevron USA Inc P O Box 1392 Bakersfield, CA 93302

Re: Notice of Preliminary Decision – Title V Permit Renewal Facility Number: S-2010 Project Number: S-1202727

Dear Mr. Ericksen:

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 Light Oil Western stationary source in Kern County, California.

The notice of preliminary decision for this project has been posted on the District's website (<u>www.valleyair.org</u>). 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. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

Brian Clements Director of Permit Services

Enclosures

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

Samir Sheikh Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5500 FAX: (661) 392-5585

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SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation Chevron USA Inc S-2010

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TITLE V PERMIT RENEWAL EVALUATION Light Oil Production Operation

Engineer: Homero Ramirez **Date:** November 16, 2021

Facility Number: Facility Name: Mailing Address:	Chevron USA Inc
Contact Name:	Lance Ericksen
Phone:	(661) 654-7968
Responsible Official:	David Reed
Title:	Operations Superintendent
Project # :	S-1202727
Deemed Complete:	July 13, 2020

I. PROPOSAL

Chevron USA Inc (facility S-2010) was issued a Title V permit on April 30, 2004, which was last renewed on December 5, 2016. 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 last renewal of the Title V permit on December 5, 2016 to present.

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 (facility S-2010) is located at the Light Oil Western stationary source in Kern County, CA.

Chevron USA Inc S-2010 S-1202727

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 Since December 5, 2016

- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (amended August 15, 2019)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended August 15, 2019)
- District Rule 4306, <u>Boilers, Steam Generators, and Process Heaters Phase</u> <u>3</u> (amended December 17, 2020)
- District Rule 4311, <u>Flares</u> (amended December 17, 2020)
- District Rule 4320, <u>Advanced Emission Reduction Options for Boilers, Steam</u> <u>Generators, and Process Heaters Greater than 5.0 MMBtu/hr</u> (amended December 17, 2020)
- District Rule 4601, <u>Architectural Coatings</u> (amended April 16, 2020)
- District Rule 4702, Internal Combustion Engines (amended August 19, 2021)
- 40 CFR 60 Subpart Kb, <u>Standards of Performance for Volatile Organic Liquid</u> <u>Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which</u> <u>Construction, Reconstruction, or Modification Commenced After July 23,</u> <u>1984</u> (amended January 19, 2021)

- 40 CFR 60 Subpart IIII, <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u> (amended June 29, 2021)
- 40 CFR Part 60 Subpart OOOO, <u>Standards of Performance for Crude Oil and</u> <u>Natural Gas Production, Transmission and Distribution</u> (amended September 14, 2020)
- 40 CFR Part 63 Subpart HH, <u>National Emission Standards For Hazardous Air</u> <u>Pollutants From Oil And Natural Gas Production Facilities</u> (amended November 19, 2020)
- 40 CFR 63 Subpart ZZZZ, <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u> (amended November 19, 2020)
- 40 CFR Part 82 Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (amended March 24, 2021)
- 40 CFR Part 82 Subpart F, <u>Recycling and Emissions Reductions</u> (amended April 10, 2020)

B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

C. Rules Added Since December 5, 2016

There are no applicable rules that were added since the last Title V renewal.

D. Rules Not Updated Since December 5, 2016

- District Rule 1070, <u>Inspections</u> (amended December 17, 1992)
- District Rule 1080, <u>Stack Monitoring</u> (amended December 17, 1992)
- District Rule 1081, <u>Source Sampling</u> (amended December 16, 1993)
- District Rule 1100, <u>Equipment Breakdown</u> (amended December 17,1992)
- District Rule 1160, Emission Statements (amended December 17,1992)
- District Rule 2010, <u>Permits Required</u> (amended December 17, 1992)
- District Rule 2020, <u>Exemptions</u> (amended December 18, 2014)

- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2040, <u>Applications</u> (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (amended December 17, 1992)
- District Rule 4001, <u>New Source Performance Standards</u> (amended April 14, 1999)
- District Rule 4002, <u>National Emissions Standards for Hazardous Air</u> <u>Pollutants</u> (amended May 20, 2004)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4102, <u>Nuisance</u> (amended December 17, 1992)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4301, <u>Fuel Burning Equipment</u> (amended December 17, 1992)
- District Rule 4305, <u>Boilers, Steam Generators and Process Heaters Phase</u> <u>2</u> (amended August 21, 2003)
- District Rule 4401, <u>Steam Enhanced Crude Oil Production Wells</u> (amended June 16, 2011)
- District Rule 4623, <u>Storage of Organic Liquids</u> (amended May 19, 2005)
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- District Rule 8011, <u>Fugitive Dust General Requirements</u> (amended August 19, 2004)
- District Rule 8021, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Construction, Demolition, Excavation, and Extraction</u> <u>Activities</u> (amended August 19, 2004)

- District Rule 8031, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Handling and Storage of Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Carryout and Trackout</u> (amended August 19, 2004)
- District Rule 8051, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Open Area</u> (amended August 19, 2004)
- District Rule 8061, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Paved and Unpaved Roads</u> (amended August 19, 2004)
- District Rule 8071, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Unpaved Vehicle/Equipment Areas</u> (amended September 16, 2004)
- 40 CFR Part 60 Subpart Dc, <u>Standards of Performance for Small Industrial-</u> <u>Commercial-Institutional Steam Generating Units</u> (amended February 16, 2012)
- 40 CFR Part 60 Subpart K, <u>Standards of Performance for Storage Vessels</u> for Petroleum Liquids for Which Construction, Reconstruction, or Modification <u>Commenced After June 11, 1973, and Prior to May 19, 1978</u> (amended October 17, 2000)
- 40 CFR Part 60 Subpart Ka, <u>Standards of Performance for Storage Vessels</u> for Petroleum Liquids for Which Construction, Reconstruction, or Modification <u>Commenced After May 18, 1978, and Prior to July 23, 1984</u> (amended December 14, 2000)
- 40 CFR Part 61 Subpart M, <u>National Emission Standard for Asbestos</u> (amended July 20, 2004)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring</u> (amended October 22, 1997)

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/Updated

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

B. Rules Not Updated

• District Rule 4102, <u>Nuisance</u> (amended December 17, 1992)

The following conditions are based on District Rule 4102. No changes have been made to the rule, so they will not be discussed any further.

Permit Unit	Condition
-0 (facility-wide permit)	#1
-301, -303, -305	#7
-312	#17, 18
-317	#3

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 most recent renewal of this facility's Title V permit, which occurred on December 5, 2016.

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

District Rule 2201 has been amended since this facility's last Title V permit was issued. 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.

However, administrative changes were made to the conditions listed below. The conditions reference "NSR Rule", but that reference has been replaced with "District Rule 2201" for the following conditions:

Permit Unit	Condition
-24, -25, -26, -201, -203 to -214	#1
-144, -146, -217	#1, 2
-148	#2, 3, 5, 10
-200	#8, 9, 10, 14, 37
-219	#1, 2, 4, 5, 6
-220	#1, 2, 5, 6, 10, 21
-221	#1, 3
-223	#2, 3, 5, 9, 11
-224	#2, 3, 5, 9
-226	#5, 15, 16 18
-227, -228, -229	#5, 15, 16 18
-245, -250, -264	#1 to 5
-266, -267	#1, 12, 26
-268	#1, 3 to 5
-294	#2, 5 to 8
-295, -296	#2, 3, 5 to 8

B. 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.

C. District Rule 4306 – <u>Boilers, Steam Generators, and Process Heaters –</u> Phase 3

This rule limits NOx and CO emission 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. Permit units S-2010-198, '-199, '-200, and '-288 are subject to this rule.

The rule was amended on December 17, 2020. The amended rule requires boilers, steam generators, and process heaters to meet the applicable NOx 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 units at this facility (S-2010-198, '-199, '-200, and '-288) 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. An Authority to Construct and emission control plan will need to be submitted in the future to address the Table 2 emission limits, as applicable to each unit.

D. District Rule 4311 – Flares

This rule limits VOC, NOx, and CO emissions from flares. Flare S-2010-317 is subject to this rule.

The rule was 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 NOx. This change does not affect flare S-2010-317 since the stationary source's emission rates have been greater than 10 tons/day for each of these pollutants.

The amended rule also requires operators of flares to meet the flare annual throughput thresholds in Table 2, or to meet revised VOC and NOx 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.

Flare S-2010-317 complies 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 permit is required at this time. An Authority to Construct and emission control plan will need to be submitted in the future to address the Table 2 and Table 3 requirements, as applicable to the unit.

E. District Rule 4320 - <u>Advanced Emission Reduction Options for Boilers</u>, <u>Steam Generators</u>, and Process Heaters Greater than 5.0 MMBtu/hr

This rule limits NOx, CO, SO2, and PM10 emissions 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. Permit units S-2010-198, '-199, '-200, and '-288 are subject to this rule.

The rule was amended on December 17, 2020. The amended rule requires units subject to the rule to meet the applicable NOx 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.

Permit units S-2010-198, '-199, '-200, and '-288 subject to this rule 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. An Authority to Construct and emission control plan will need to be submitted in the future to address the Table 2 emission limits, as applicable to each unit.

F. District Rule 4601 – Architectural Coatings

This rule limits the emissions of VOCs from architectural coatings, and it specifies architectural coatings storage, cleanup, and labeling requirements.

This rule was amended on April 16, 2020. The amendments to the rule include the following:

- 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).
- 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.
- The phrase "blends or repackages" was added to rule language to extend the applicability of rule language to facilities involved in those activities.
- 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.
- Labeling requirements were updated to add new labeling standards consistent with new coatings categories per the SCM.
- 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.
- New sections were added to coincide with new coating categories pursuant to the ARB SCM.
- The compliance schedule was updated to account for the new amendments to rule language by adding the phrase "the dates specified within the text of the rule."

The only reference to this rule is in the facility-wide permit (S-2010-0), specifically by conditions #24 through 26 and 41. The following existing conditions been revised as shown in strikethrough/underline to reflect the changes to rule 4601 as follows:

- 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 <u>Table 1 or Table 2</u> of District Rule 4601 (12/17/09 4/16/20) 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 4/16/20) 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 (12/17/09-4/16/20). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SNUAPCD 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 4/16/20); 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

Therefore, continued compliance with this rule is expected.

G. District Rule 4702 - Internal Combustion Engines;

40 CFR 60 Subpart IIII, <u>Standards of Performance for Stationary</u> Compression Ignition Internal Combustion Engines; and

40 CFR 63 Subpart ZZZZ, <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u>

The facility had seven diesel-fired emergency standby IC engines (S-2010-300 through '-306) that were potentially subject to these regulations at the time this Title V Renewal application was submitted. However, the permittee cancelled all seven permits in January 2021, so these regulations no longer apply to the facility.

H. 40 CFR 60 Subpart Kb - <u>Standards of Performance for Volatile Organic</u> <u>Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for</u> <u>Which Construction, Reconstruction, or Modification Commenced After</u> <u>July 23, 1984</u>

Subpart Kb is applicable to this facility for tanks that meet the age, size and vapor pressure parameters. However, the amendments only apply to external and internal floating roof tanks. This facility does not have any floating roof storage tanks so no revisions are necessary to address the latest amendments.

I. 40 CFR 60 Subpart OOOO – <u>Standards of Performance for Crude Oil</u> and Natural Gas Production, Transmissions and Distribution; and

Subpart OOOOa - <u>Standards of Performance for Crude Oil and Natural Gas</u> <u>Facilities for which Construction, Modification or Reconstruction</u> <u>Commenced After September 18, 2015</u>

These subpart could potentially apply to this facility's tanks. However, pursuant to section §60.5365 (in Subpart OOOO) and §60.5365a (in Subpart OOOOa), these subpart does not apply since the emissions from each of the tanks are estimated to be less than 6 tons per year. The tanks at this facility are equipped with vapor control that limits emissions to less than 6 tons/year. Therefore, these subparts do not apply.

J. 40 CFR Part 63 Subpart HH - <u>National Emission Standards For</u> <u>Hazardous Air Pollutants From Oil And Natural Gas Production Facilities</u>

Subpart HH regulates the emissions of HAPs from oil and gas production facilities.

A facility that exclusively processes, stores, or transfers black oil (defined in § 63.761 as a hydrocarbon (petroleum) liquid with an initial producing gas-to-oil ratio (GOR) less than 0.31 cubic meters per liter and an API gravity less than 40 degrees) is not subject to the requirements of this subpart. The applicant has confirmed that production records of the Lost Hills property indicates a GOR or 0.11 cubic meters per liter and an API gravity that is below 30 degrees API. As such, the facility is exempt from the requirements of 40 CFR Part 63, Subpart HH.

K. 40 CFR 82 Subpart B – <u>Servicing of Motor Vehicle Air Conditioners</u>

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
-0 (facility-wide permit)	29

L. 40 CFR 82 Subpart F – <u>Recycling and Emissions Reductions</u>

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.

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
-0 (facility-wide permit)	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 is not requesting any changes to the existing permit shield 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.

XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

ATTACHMENTS

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

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-2010-0-4



FACILITY-WIDE REQUIREMENTS

- 1. {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- {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 Remit to Oserate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility-wide Requirements for S-2010-0-4 (continued)

- 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

FACILITY-WHOR REQUIREMENTS CONTINUE ON NEXT PAGE

Facility-wide Requirements for S-2010-0-4 (continued)

- 23. {4383} 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). 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. 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 1 or Table 2 of District Rule 4601 (4/16/20) 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 (4/16/20) 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 (4/16/20). [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
- {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
- 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility-wide Requirements for S-2010-0-4 (continued)

- 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 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 (4/16/20); 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
- 42. On April 30, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [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-2010-4-13

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF WASH TANK WITH VAPOR RECOVERY SYSTEM SERVING TANKS S-2010-4, '10, '11, '266, '267, '291, '292, '293, AND RECEIVING CRUDE OIL FROM FACILITY S-1130, WITH COLLECTED VAPORS PIPED TO GAS PLANT S-49

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery 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 Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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] Federally Enforceable Through Title V Permit
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. Fugitive emissions from tank components in vapor service, gas/liquid separator vessel, compressor skids, and shared tank vapor control piping shall not exceed 17.9 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [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 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-4-13 (continued)

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-4-13 (continued)

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

Location:

S-2010-4-13 : Nov 16 2021 7:03AM -- RAMIREZH

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2010-10-6

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

210,000 GAL FIXED ROOF STORAGE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. If the API gravity of crude oil stored in this tank is equal to or greater than 30 degrees, then tank is subject to applicable requirements of Rule 4409. [District Rule 4409, 3.22] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Any tank gauging or sampling device shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute are violations of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit
- 8. The 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-10-6 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 a component type is found to have no leak after four consecutive quarterly inspections, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. The 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
- 16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed (except for PV valve venting on tanks not required to have a vapor recovery system). Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Sludge from tanks with a TVP of = 1.5 psia must be stored in tanks that have a vapor control efficiency of at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the 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 4623] Federally Enforceable Through Title V Permit
- 20. Allowable methods of cleaning include using steam, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-10-6 (continued)

21. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 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-2010-11-6

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

210,000 GAL FIXED ROOF BALANCE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. If the API gravity of crude oil stored in this tank is equal to or greater than 30 degrees, then tank is subject to applicable requirements of Rule 4409. [District Rule 4409, 3.22] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Any tank gauging or sampling device shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute are violations of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit
- 8. The 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-11-6 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 a component type is found to have no leak after four consecutive quarterly inspections, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. The 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
- 16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed (except for PV valve venting on tanks not required to have a vapor recovery system). Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Sludge from tanks with a TVP of = 1.5 psia must be stored in tanks that have a vapor control efficiency of at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the 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 4623] Federally Enforceable Through Title V Permit
- 20. Allowable methods of cleaning include using steam, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-11-6 (continued)

21. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 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-2010-12-8

EXPIRATION D

SECTION: 08 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

84,000 GAL FIXED ROOF WASH TANK #1 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2010-15

PERMIT UNIT REQUIREMENTS

- The tank shall be fully enclosed and shall be equipped with a closed system that collects all VOCs from the storage tank. Collected vapors shall be routed to the gas gathering system that connects to the 17Z gas processing plant. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery 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 Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] 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 4623] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. VOC emissions from components in light oil and gas service associated with tank up to vapor control system trunk line shall not exceed 9.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. VOC emissions from the components associated with the vapor control system shall not exceed 20.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201 and 1070] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-12-8 (continued)

- 10. 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
- 11. All piping, fittings, and valves directly affixed to and within 5 ft of 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
- 12. If any of the tank components directly affixed to and within 5 ft of this tank 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
- 13. Upon detection of any leaking components directly affixed to and within 5 ft of this tank (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
- 14. Leaking components directly affixed to and within 5 ft of this tank that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type which is directly affixed to and within 5 ft of this 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
- 16. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Any component directly affixed to and within 5 ft of this tank 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
- 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
- 19. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 20. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-12-8 (continued)

- 21. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 23. 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 4623] Federally Enforceable Through Title V Permit
- 24. 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 4623] Federally Enforceable Through Title V Permit
- 25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. 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 4623] 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-12-8 (continued)

- 32. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. 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 1070]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2010-15-8

SECTION: 08 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

EXPIRATION D

84,000 GAL FIXED ROOF PETROLEUM POWER OIL TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-12

PERMIT UNIT REQUIREMENTS

- All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] 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 leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves directly affixed to and within 5 ft of 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 directly affixed to and within 5 ft of this tank 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 directly affixed to and within 5 ft of this tank (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-15-8 (continued)

- 8. Leaking components directly affixed to and within 5 ft of this tank that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 9. If a component type which is directly affixed to and within 5 ft of this 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. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. Any component directly affixed to and within 5 ft of this tank 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
- 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
- 13. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 14. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable-Through Title V Permit

Permit Unit Requirements for S-2010-15-8 (continued)

- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. 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 1070]

s and part of the Facility-wide Permit to Operate.

PERMIT UNIT: S-2010-23-36

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

Location:

5,000 BARREL FIXED ROOF WASH TANK WITH VAPOR CONTROL- (CAHN 3 OIL TREATING PLANT)

PERMIT UNIT REQUIREMENTS

EXPIRATION D

- Except as otherwise provided in this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623] 1. Federally Enforceable Through Title V Permit
- 2. The vapor recovery system shall be maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, 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 4623] Federally Enforceable Through Title V Permit
- 5. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. A gas or liquid leak is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. Vapor control system compressor shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The vapor control system shall reduce VOC emissions by at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 8. The vapor control system shall route all collected vapors to a sales pipeline. [District Rule 4623] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and 9. is operating as designed at all times. [District Rule 2520] Federally Enforceable Through Title V Permit
- 10. Vapor control system shall include piping from 4 Wemcos, separators and knockouts, tanks S-2010-23, -24, -25, -26, -201, -203, -204, -205, -206, -207, -208, -209, -210, -211, -212, -213, -214, -217, -220, -221, -226, -227, -228, -229, -245, -250, -264, -313, -314, vapor compressors K-301, K-302, and K-303, inlet scrubber V-301, knockout vessel V-302, sulfur vessels V-310 and V-311, gas/liquid separator V-101, Unicels M-210A and M-210B, vapor compressors K-731A and K-731B and air-cooled heat exchanger with separator vessel V-303. [District Rule 2201]
- 11. Volume of separator vessel V-303 shall not exceed 100 bbls. [District Rule 2020] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-23-36 (continued)

- 12. The Unicel water treatment vessels M-210A and M-210B may be open to the atmosphere if the piping connecting them to the vapor control system is closed and leak-free. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Fugitive VOC emission rate from vapor control system shall not exceed 226.2 lb/day. [District Rule 2201]
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. Only operators who elect to participate in the voluntary tank preventive inspection and maintenance, and tank interior cleaning program (program) shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5. When using Tables 3 to 5 and Section 5.7.5 provisions, operators shall perform the procedures as expeditiously as practicable and minimize emissions to the maximum extent practicable. To participate in this program, the operator shall comply with the requirements of Sections 5.7.1 through 5.7.4. [District Rule 4623] 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 18. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 19. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 20. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 21. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 22. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-23-36 (continued)

- 23. 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 4623, Table 3] 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 liquid a a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP iss 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 4623] 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 27. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. 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 4623] Federally Enforceable Through Title V Permit
- 32. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-23-36 (continued)

- 35. 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) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain with the permit accurate fugitive component counts and the resulting emissions calculated using U.S. EPA document "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors, and shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Records of all required monitoring data and support information shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rules 1070, 2520 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-24-8

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF WASH TANK T-102 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 80 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT RECHIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-24-8 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-25-9

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BBL FIXED ROOF WASH/REJECT/SHIPPING TANK T-103 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - (CAHN 3)

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-25-9 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-26-7

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BBL FIXED ROOF SHIPPING/REJECT TANK T-104 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-26-7 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-142-21

EXPIRATION D

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

Location:

2.000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#T-3) CONNECTED TO VAPOR CONTROL SYSTEM CONSISTING OF FOUR VAPOR COMPRESSOR SKIDS, TANK BLANKET GAS SCRUBBER, AND VAPOR PIPING (LOCATED AT 32 U.S. OIL CLEANING PLANT)

- The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from 1. the storage tank. The vapor control system shall be APCO-approved and maintained in leak-free condition. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. The following tanks shall be connected to vapor control system: S-2010-142 (T-3), S-2010-143 (T-8), S-2010-144 (T-12), S-2010-146 (T-2), S-2010-148 (T-7), S-2010-223 (T-12A), S-2010-224 (T-8A), and S-2010-297 (T-301). [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Vapor control system shall consist of vapor collection piping and four vapor compressor skids. Each vapor compressor skid shall consist of one compressor, liquid knockout vessel(s) and/ or scrubber(s), condensate and/ or lube oil pump(s). Vapors are sent to sales gas pipeline or used as a tank blanket gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain accurate component count for tank, compressor skids, and tank vapor control piping according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from tank, compressor skids, and tank vapor control piping shall not exceed 2.4 lb VOC/ day. 5. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623, 5.6.1] 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
- If the source can demonstrate compliance with the provisions of Rule 4623, Section 5.7 (amended 5/19/05), then any 8. deviations that are addressed under the provisions of Tables 3 through 5 shall not be in violation of Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-142-21 (continued)

- 11. 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. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 12. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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
- 16. 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 shall 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
- 17. 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, Section 5.7 (amended 12/20/01). 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, Section 5.7 (amended 12/20/01). [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 18. 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
- Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, Section 5.7 (amended 12/20/01), even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Except as otherwise provided in this permit, 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
- 22. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-143-7

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION DA

84,546 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-8 WITH VAPOR CONTROL SYSTEM LISTED UNDER S-2010-142

PERMIT UNIT REQUIREMENTS

- 1. Tank shall be connected to vapor control system S-2010-142. [District Rule 4623] 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, 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
- 4. Except as otherwise provided in this permit, all piping valves and fittings shall be constructed and maintained in a leak-free condition [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 7. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-143-7 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. {2591} 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

PERMIT UNIT: S-2010-144-5

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION D

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-12 WITH VAPOR CONTROL (32 US OIL CLEANING PLANT)

- 1. Tank shall be connected to vapor control system S-2010-142. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, tank gauging and sampling devices shall be equipped with leak-free covers which shall remain closed at all times except during gauging and sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 6. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-144-5 (continued)

- 10. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. {2591} 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

PERMIT UNIT: S-2010-146-5

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION D

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-2 WITH VAPOR CONTROL (32 US OIL CLEANING PLANT)

- 1. Tank shall be connected to vapor control system S-2010-142. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, tank gauging and sampling devices shall be equipped with leak-free covers which shall remain closed at all times except during gauging and sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 6. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-146-5 (continued)

- 10. Except as otherwise provided in this permit, any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. {2591} 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

PERMIT UNIT: S-2010-148-8

EXPIRATION D

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

Location:

16.507 GALLON (393 BBL) FIXED ROOF CRUDE OIL DRAIN TANK (#T-7) CONNECTED TO VAPOR CONTROL SYSTEM REFERENCED ON S-2010-142 (LOCATED AT 32 U.S. OIL CLEANING PLANT)

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation 2. Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District Rule 2201] Federally Enforceable Through 3. Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623, 5.6.1] 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
- If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7 (amended 5/19/05), then any 6. deviations that are addressed under the provisions of Table 3 through 6 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a 8. leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-148-8 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 18. Except as otherwise provided in this permit, any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 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
- 20. Except as otherwise provided in this permit, 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
- 21. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-198-7

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

10.5 MMBTU/HR NATURAL GAS-FIRED TANK HEATING BOILER #401 WITH A POWER FLAME MODEL NVC6-G-30 LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal monitoring and recordkeeping shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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 1070] Federally Enforceable Through Title V Permit
- 8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 9. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. 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
- 11. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmv NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 115 ppmv CO @ 3% O2 or 0.084 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-198-7 (continued)

- 13. 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 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 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 17. 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 and 4306] Federally Enforceable Through Title V Permit
- 18. Source testing to measure natural gas-combustion NOx 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 and 4306] Federally Enforceable Through Title V Permit
- 19. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. 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
- 21. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [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.

Permit Unit Requirements for S-2010-198-7 (continued)

- 24. 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 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. This unit is not used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the requirements of District Rule 4301 (Amended December 17, 1992) 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
- 27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 28. 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, and 4306] Federally Enforceable Through Title V Permit
- 29. Pursuant to Rule 4320, 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
- 30. 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
- 31. Formerly S-1128-391.

PERMIT UNIT: S-2010-199-7

EXPIRATION D

SECTION: 03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

10.5 MMBTU/HR NATURAL GAS FIRED TANK HEATING BOILER #B402, WITH A POWER FLAME NOVA PLUS MODEL NVCR6-G-30 LOW NOX BURNER (SERIAL # 120519797)

PERMIT UNIT REQUIREMENTS

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal monitoring and recordkeeping shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 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
- 7. 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 1070] Federally Enforceable Through Title V Permit
- 8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 9. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. 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
- 11. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00214 lb-SOx/MMBtu or 0.75 gr-S/100 scf, 0.0076 lb-PM10/MMBtu, 115 ppmvd CO @ 3% O2 or 0.084 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 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.

Permit Unit Requirements for S-2010-199-7 (continued)

- 13. 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 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 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 17. 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 and 4306] Federally Enforceable Through Title V Permit
- 18. Source testing to measure natural gas-combustion NOx 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 and 4306] Federally Enforceable Through Title V Permit
- 19. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. 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
- 21. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [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.

Permit Unit Requirements for S-2010-199-7 (continued)

- 24. 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 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. This unit is not used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the requirements of District Rule 4301 (Amended December 17, 1992) 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
- 27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 28. 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, and 4306] Federally Enforceable Through Title V Permit
- 29. Pursuant to Rule 4320, 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
- 30. 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
- 31. Formerly S-1128-392.

PERMIT UNIT: S-2010-200-12

EXPIRATION D

SECTION: SW29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

30.0 MMBTU/HR STRUTHERS NATURAL GAS, PROPANE, AND BUTANE FIRED PORTABLE STEAM GENERATOR S/N 75/76-37153-2 A WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER. PERMITTED AS S-1128-952 IN WESTERN HEAVY OIL STATIONARY SOURCE

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. 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
- 6. {4565} 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 1070]
- 7. 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
- 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
- 9. 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
- 10. 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
- 11. 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
- 12. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-200-12 (continued)

- 13. The duration of each startup and shutdown period shall not exceed 2.0 hours. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. Source testing for NOx and CO for each approved fuel shall be conducted within 60 days of first firing on fuel. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with NOx and CO emission limits shall be demonstrated not less than once every 36 months if compliance is demonstrated on two consecutive annual compliance tests. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. 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
- 21. The following test methods shall be used: NOx (lb/MMBtu) EPA Method 19, NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, PM10 EPA Method 5, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 22. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. 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 an approved portable emission 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
- 24. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. 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

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

Permit Unit Requirements for S-2010-200-12 (continued)

- 26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 27. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule1081] Federally Enforceable Through Title V Permit
- 28. Copies of all fuel invoices, 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 and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
- 30. 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
- 31. 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
- 32. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8 or ARB Method 1-100; 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 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
- 33. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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 D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 34. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2, 4305, 6.2.1, and 4306] Federally Enforceable Through Title V Permit
- 35. 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 Kern County Rule 407] Federally Enforceable Through Title V Permit
- 36. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 37. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 1081 and 220]] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-200-12 (continued)

- 38. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 39. 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, 9.4.2] Federally Enforceable Through Title V Permit
- 40. Unit shall not be located within 1000 ft of a school. [CH&SC 42301.6]
- 41. Pursuant to Rule 4320, 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
- 42. 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
- 43. Formerly S-1128-927.

PERMIT UNIT: S-2010-201-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PRODUCED WATER TANK T-201 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-201-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-203-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PRODUCED WATER TANK T-203 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-203-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-204-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF DRAIN OVERFLOW TANK T-204 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-204-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-205-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FILTER BACKWASH TANK T-504 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 80 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-205-4 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-206-4

EXPIRATION DATE: 02/28/202

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF TANK T-500 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 80 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT RECHIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-206-4 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-207-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF TANK T-501 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 80 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-207-4 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-208-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF FILTER WATER TANK T-502 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-208-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-209-4

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION

5,000 BBL FIXED ROOF WATER TANK T-503 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 80 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT RECHIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-2010-209-4 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-210-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF FILTER BACKWASH TANK T-505 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-210-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-211-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

6,500 BBL FIXED ROOF WASTEWATER TANK T-201B VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-211-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-212-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

29,000 BBL FIXED ROOF PRODUCED WATER TANK T-205 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-212-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-213-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

9,600 BBL FIXED ROOF PRODUCED WATER TANK T-206 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-213-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-214-4

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,700 BBL FIXED ROOF PRODUCED WATER TANK T-207 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-214-4 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. {2591} 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

PERMIT UNIT: S-2010-217-4

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION DA

5000 BBL FIXED-ROOF WASH TANK T-105 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23

- 1. Tank shall operate at constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 4. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-217-4 (continued)

- 10. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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
- 17. Except as otherwise provided in this permit, 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. {2591} 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

PERMIT UNIT: S-2010-219-6

EXPIRATION

SECTION: SW 3 TOWNSHIP: T27S RANGE: R21E

EQUIPMENT DESCRIPTION:

SAND AND SOLIDS SEPARATION OPERATION WITH TWO 17,682 GALLON BELOW GRADE BASINS , 28' WIDE BY 75' LONG WITH SLOPING BOTTOM FROM 0' TO 4' DEEP AND 3' OVERFLOW WEIR, ONE 10,200 GALLON TRENCH, 8' WIDE BY 57' LONG BY 6' DEEP

PERMIT UNIT REQUIREMENTS

- Sand basins and trench shall be covered at all times by sunscreen tarps except when empty of all petroleum containing materials or during maintenance and clean out operations. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC emissions from this operation shall not exceed 23.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Sand basins shall not receive material on continuous basis. Continuous basis means receiving material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds or impoundments. [District Rule 4402] Federally Enforceable Through Title V Permit
- 4. Sand basins shall receive only liquids and solids generated from oil production operations. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall pump off fluids from overflow trench to maintain the level in the trench at it's minimum practical level. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Solids removed from basins shall only be disposed of at an approved disposal site or recycling facility or be used to make road base for use on roads owned or maintained by Chevron USA. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-220-9

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,300 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-208) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- 1. Tank vapors space shall vent only to the vapor control system identified on S-2010-23. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 2. Vapor control system efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Tank safety pressure relief valve(s) shall be set to open only when tank vapor space pressure is higher than vapor control system compressor activation pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank vapor space appurtenances shall be maintained leak-free as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all tank gauging or sampling devices, relief valves, manholes, etc. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 9. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 3.17] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-220-9 (continued)

Facility Name: CHEVRON USA INC

S-2010-220-9 : Nov 16 2021 7:03AM -- RAMIREZH

Location:

LIGHT OIL WESTERN STATIONARY SOURCE,

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 21. Interior tank cleaning shall be performed in accordance with provisions specified in Table 3 of Rule 4623. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 22. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. {2591} 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

PERMIT UNIT: S-2010-221-4

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION DA

500 BARREL FIXED ROOF PRODUCED WATER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23

- 1. Tank shall operate at constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all tank gauging or sampling devices, relief valves, manholes, etc. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 5. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 3.17] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-221-4 (continued)

- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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

PERMIT UNIT: S-2010-223-4 SECTION: NW32 TOWNSHIP: 26S RANGE: 21E EQUIPMENT DESCRIPTION: 2,500 BBL CRUDE OIL WASH TANK (#T-12A)

EXPIRATION C

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] 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. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-223-4 (continued)

- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table
 3] Federally Enforceable Through Title V Permit
- 18. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 20. Except as otherwise provided in this permit, 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
- 21. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-224-5

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

2000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-8A WITH VAPOR CONTROL SYSTEM LISTED IN S-2010-142

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] 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. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. A leak-free condition is defined as a condition without a gas leak or a liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2010-224-5 (continued)

- 12. Permit holder shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 13. Permit holder shall comply with all applicable Tank Interior Cleaning Program requirements specified in Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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
- 16. 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
- 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
- 18. Except as otherwise provided in this permit, 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
- 19. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-226-5

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,300 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-208A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-226-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

of

the Facility-wide Permit to Operate.

PERMIT UNIT: S-2010-227-5

EXPIRATION DA

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-227-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

PERMIT UNIT: S-2010-228-5

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209-B) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-228-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District Rule 2201, 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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.

PERMIT UNIT: S-2010-229-5

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK (T-210) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-229-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

of

the Facility-wide Permit to Operate.

PERMIT UNIT: S-2010-245-5

EXPIRATION

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-106) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

- 1. Tank shall vent only to vapor control system listed on permit S-2010-23. [District Rules 2201, 4623, 5.1] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Daily fugitive VOC emission rate shall not exceed 4.4 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District Rules 2201, 4623, 5.1] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, 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.

Permit Unit Requirements for S-2010-245-5 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 17. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 18. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 19. 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 4623, 5.7] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-245-5 (continued)

- 20. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 21. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 22. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 24. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 25. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 26. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 27. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623, 5.7] Federally Enforceable Through Title V Permit
- 28. 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.

PERMIT UNIT: S-2010-250-5

EXPIRATION

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-107) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

- 1. Tank shall vent only to vapor control system listed on permit S-2010-23. [District Rules 220, 4623, 5.1] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Daily fugitive VOC emission rate shall not exceed 4.4 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District Rules 2201, 4623, 5.1] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, 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.

Permit Unit Requirements for S-2010-250-5 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 17. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 18. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 19. 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 4623, 5.7] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-250-5 (continued)

- 20. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 21. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 22. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 24. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 25. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 26. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 27. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623, 5.7] Federally Enforceable Through Title V Permit
- 28. 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.

PERMIT UNIT: S-2010-264-5

EXPIRATION D

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

18,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-211) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

- 1. Tank shall vent only to vapor control system listed on permit S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Daily fugitive VOC emission rate shall not exceed 4.6 lb-VOC/day. [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 and 40 CFR 60.110(b)] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 to ensure the appropriate TVP test method is used. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
- 9. 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
- 10. 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

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

Permit Unit Requirements for S-2010-264-5 (continued)

- 11. For crude oil with an API gravity greater than 26 degrees, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), 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 with the procedures in District Rule 4623, Appendix B. As an alternative to using ASTM D 323-94, 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 US EPA. [District Rule 4623, 6.4.3] 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 Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
- 13. In lieu of testing each uncontrolled fixed roof tank, an operator may conduct a TVP testing of a representative tank provided the following criteria are met: (1) The selection of representative, uncontrolled fixed roof tanks is submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) One uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (3) the representative uncontrolled fixed roof tank shall be the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells; (4) The stored organic liquid in each of the represented tanks is the same and came from the same source; and (5) The TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. 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
- 16. 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
- 17. 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
- 18. 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
- 19. 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

PERMITURIN REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Permit Unit Requirements for S-2010-264-5 (continued)

- 20. 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
- 21. 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
- 22. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 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 one of the following methods (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) 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) 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. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
- 28. 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
- 29. 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
- 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

the Facility-wide Permit to Operate.

Location:

PERMIT UNIT: S-2010-266-5

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

100 BBL FIXED ROOF DRAIN TANK (T-4) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4

PERMIT UNIT REQUIREMENTS

- The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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
- 5. 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
- 6. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. 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
- 8. 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



Permit Unit Requirements for S-2010-266-5 (continued)

- 9. 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
- 10. 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
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. Fugitive emissions from tank components shall not exceed 9.1 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-266-5 (continued)

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-267-5

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF SLOP OIL TANK (T-5) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4

PERMIT UNIT REQUIREMENTS

- The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rules 220, 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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
- 5. 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
- 6. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. 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
- 8. 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



Permit Unit Requirements for S-2010-267-5 (continued)

- 9. 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
- 10. 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
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. Fugitive emissions from tank components shall not exceed 6.4 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-267-5 (continued)

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-268-4 SECTION: SW08 TOWNSHIP: 30S RANGE: 22E EQUIPMENT DESCRIPTION: 91 BBL CRUDE OIL VESSEL WITH PRV (8Z NEMU)

EXPIRATION D

PERMIT UNIT REQUIREMENTS

- 1. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 2. Any vessel gauging or sampling devices(s) shall be equipped with a leak-free cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.5 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Vessel liquid throughput shall not exceed 2000 barrels per day and 18,250 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from tank liquid service components shall not exceed 4.7 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-268-4 (continued)

- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 1070] Federally Enforceable Through Title V Permit
- 14. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. Interior vessel cleaning shall be performed in accordance with provisions specified in Section 5.7.5.3 of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 22. 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 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-288-6

EXPIRATION D

SECTION: 29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

62.5 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 SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. 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
- 6. 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 1070] Federally Enforceable Through Title V Permit
- 7. 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
- This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE or SW 1/4 Section 32, T26S/R21E, and NW or SW 1/4 Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
- 9. 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 1070] Federally Enforceable Through Title V Permit
- 10. Flue gas recirculation (FGR) shall be utilized as necessary in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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

Permit Unit Requirements for S-2010-288-6 (continued)

- 12. Emission rates, except during startup and shutdown shall not exceed: NOx (as NO2): 7 ppmvd @ 3% O2 or 0.008 lb/MMBtu; or CO: 25 ppmvd @ 3% O2 or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. Emission rates shall not exceed any of the following: PM10: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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
- 15. Permittee shall maintain a record of the duration of each startup and shutdown of this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. Emission rates during startup and shutdown shall not exceed: NOx 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
- 17. Emissions rate of NOx shall not exceed 45.0 lb/day nor 4380 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Emissions rate of CO shall not exceed 97.1 lb/day nor 10,129 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD or double GC performed in the laboratory. [District Rules 1070, 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
- 20. 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 Rules 1070, 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
- 21. 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 Rules 1070, 2201,2520, and 4320] Federally Enforceable Through Title V Permit
- 22. 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 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 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. 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 the performing the notification and testing required by this condition. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-288-6 (continued)

- 24. 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 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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 Rule s 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (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
- 28. Source testing to measure natural gas-combustion NOx 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 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. 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
- 30. 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
- 31. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (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, SOx (lb/MMBtu) ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. 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
- 33. 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 District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 34. 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
- 35. 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 noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-288-6 (continued)

36. All records shall be maintained and retained on-site for a minimum period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

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PERMIT UNIT: S-2010-291-3

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700A) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

PERMIT UNIT REQUIREMENTS

- 1. The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-291-3 (continued)

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-291-3 (continued)

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-292-3

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700B) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

PERMIT UNIT REQUIREMENTS

- 1. The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-292-3 (continued)

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-292-3 (continued)

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

VIII

PERMIT UNIT: S-2010-293-3

EXPIRATION D

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-710) RECEIVING FLUID FROM TWO UNVENTED LIQUID FILTER VESSELS AND SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

PERMIT UNIT REQUIREMENTS

- The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-293-3 (continued)

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-2010-293-3 (continued)

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-294-4

EQUIPMENT DESCRIPTION:

EXPIRATION DAT

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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
- 9. 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 Rule4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, 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.

Permit Unit Requirements for S-2010-294-4 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. If tank is left on site for more than six months, permittee shall notify the APCO in writing at least three (3) days prior to performing tank interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank, 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-294-4 (continued)

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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.

PERMIT UNIT: S-2010-295-4

EQUIPMENT DESCRIPTION:

EXPIRATION DAT

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, 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.

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. If tank is left on site for more than six months, permittee shall notify the APCO in writing at least three (3) days prior to performing tank interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank, 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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.

PERMIT UNIT: S-2010-296-4

EQUIPMENT DESCRIPTION:

EXPIRATION DAT

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201, 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, 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.

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. If tank is left on site for more than six months, permittee shall notify the APCO in writing at least three (3) days prior to performing tank interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank, 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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

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PERMIT UNIT: S-2010-297-3

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION D

1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-301 WITH VAPOR CONTROL SYSTEM LISTED 0N S-2010-142

PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 1.0 lb/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] 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. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. 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. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 9. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. Permit holder shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit

- 12. Permit holder shall comply with all applicable Inspection and Maintenance requirements specified in Table 3 of Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. {3246} 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 1070]

PERMIT UNIT: S-2010-308-3

EXPIRATION DA

SECTION: 29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

TEOR SYSTEM WITH UP TO 130 STEAM ENHANCED WELLS OPERATED WITH CLOSED CASING VENTS. PERMIT EXEMPT WELL TESTERS, PRESSURE VESSELS, RELIEF TANK, AND MASTER TRAP(S) VENTED TO H2S REMOVAL SYSTEM AND THE FIELD GAS GATHERING PIPELINE

PERMIT UNIT REQUIREMENTS

- Operation of H2S scrubber is optional. [District Rule 2201] Federally Enforceable Through Title V Permit 1.
- 2. 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 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
- 3. Emissions rate of VOC associated with the fugitive emissions from TEOR system and ancillary equipment 94.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Production from TEOR operation shall be sent only to tanks equipped with 99% vapor control. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 5. This permit authorizes 10 leaks exceeding an instrument reading of 10,000 ppmy. Leaks greater in number than 10 and exceeding 10,000 ppmv are a violation of this permit. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, casing vent valves shall be closed and plugged. [District Rules 2201 and 6. 4401] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of the date and well identification where steam injection or well stimulation occurs, 7. current list of all thermally enhanced production wells associated with this operation, permit numbers of tanks receiving production from the TEOR operation, leak inspection results, and accurate fugitive component counts of components in gas service and resulting emissions calculated using the emission factors in the CAPCOA California 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 (Feb 1999). [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- {4272} Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally 8. Enforceable Through Title V Permit
- 9. {4273} An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, 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 the steamenhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5] 5.1 and 5.5.2] Federally Enforceable Through Title V Permit

Location:

- 10. {4274} 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 an 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 as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
- 11. {4275} 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 a 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] Federally Enforceable Through Title V Permit
- 12. {4276} An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting reinspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
- 13. {4277} Each hatch shall be 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 5.7.2] Federally Enforceable Through Title V Permit
- 14. {4278} An operator shall comply with the requirements of Section 6.7 of Rule 4401 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
- 15. {4279} Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401 5.8.1] Federally Enforceable Through Title V Permit
- 16. {4280} An operator 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 this rule 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 5.8.2] Federally Enforceable Through Title V Permit
- 17. {4281} In addition to the inspections required by Section 5.8.1 of 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 4 of Rule 4401. [District Rule 4401 5.8.3] Federally Enforceable Through Title V Permit
- 18. {4282} In addition to the inspections required by Sections 5.8.1, 5.8.2 and 5.8.3 of 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 Section 5.8.4.1 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 5.8.4] Federally Enforceable Through Title V Permit
- 19. {4283} An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401 5.8.5] Federally Enforceable Through Title V Permit

- 20. {4284} 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
- 21. {4285} An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit
- 22. {4286} An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit
- 23. {4287} An operator 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 5.9.3] Federally Enforceable Through Title V Permit
- 24. {4288} Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an 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 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
- 25. {4289} 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
- 26. {4290} The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit
- 27. {4291} The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit
- 28. {4292} 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 5.9.7] Federally Enforceable Through Title V Permit
- 29. {4293} The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit
- {4295} 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 as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit
- 31. {4296} The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit
- 32. {4297} Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401 6.1.5] Federally Enforceable Through Title V Permit

- 33. {4298} Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401 6.1.6] Federally Enforceable Through Title V Permit
- 34. {4299} An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit
- 35. {4300} 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
- 36. {4303} 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
- 37. {4304} An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. 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. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit
- 38. {4305} If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit
- 39. {4306} If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit
- 40. {4307} An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit
- 41. {4309} 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 6.3.1] Federally Enforceable Through Title V Permit
- 42. {4310} 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 6.3.2] Federally Enforceable Through Title V Permit

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

- 43. {4311} 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 6.3.3] Federally Enforceable Through Title V Permit
- 44. {4312} 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 6.3.5] Federally Enforceable Through Title V Permit
- 45. {4313} Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. 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. the date of repair, replacement, or removal from operation of leaking components, identify 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, 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, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, 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 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-309-2 SECTION: SW 3 TOWNSHIP: 27S RANGE: 21E EQUIPMENT DESCRIPTION: 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

EXPIRATION

PERMIT UNIT REQUIREMENTS

- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

PERMIT UNIT: S-2010-310-2 SECTION: SW 3 TOWNSHIP: 27S RANGE: 21E EQUIPMENT DESCRIPTION: 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

PERMIT UNIT REQUIREMENTS

EXPIRATION

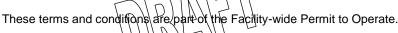
- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

PERMIT UNIT: S-2010-311-2 SECTION: SW 3 TOWNSHIP: 27S RANGE: 21E EQUIPMENT DESCRIPTION: 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

PERMIT UNIT REQUIREMENTS

- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

EXPIRATION



PERMIT UNIT: S-2010-312-3

SECTION: SW3 TOWNSHIP: T27S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION D

DEWATERING AND OIL RECOVERY OPERATION WITH DRY MATERIAL HOPPER ME-722 SERVED BY DUST COLLECTOR, 1000 GALLON POLYMER TANK T-721, MACERATOR, SOLIDS CONVEYOR(S), 1000 BBL SLURRY MIXING TANK T-711, CENTRISYS CA21-4 HC THREE PHASE CENTRIFUGE (OR EQUIVALENT), SOLIDS DISCHARGE CONVEYOR AND TEMPORARY SOLIDS STORAGE PAD (CAHN 3 OIL TREATING PLANT)

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 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the dust collector serving hopper shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Dust collector serving hopper shall be in operation whenever bags are loaded to the hopper. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 4. The dust collector shall be maintained and operated according to manufacturer's specifications. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 5. The dust collector cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 6. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 7. The dust collector shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 8. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Centrifuge liquids shall only be sent to vapor controlled tanks S-2010-313 and '-314. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Centrifuge shall be enclosed except for solids discharge opening. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Centrifuge solids shall be sent only to temporary solids storage pad prior to load-out. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Slurry mixing tank T-711 shall receive material from vacuum truck unloading basins S-2101-309 through '-311, hopper, polymer tank T-721, and shall be enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Conveyor from hopper to slurry tank shall be enclosed and include flexible spout at slurry tank inlet. [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.

- 14. PM10 emissions from hopper shall not exceed 0.0011 lb/ton of dry material loaded through the feed hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Emissions from the dewatering and oil recovery operation shall not exceed any of the following limits: 0.1 lb-PM10/day or 2.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Dry material additive sacks shall be opened only inside enclosed hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Dry material additive sacks shall be disposed of immediately after use and in a manner that minimizes fugitive dust emissions. [District Rule 4102] Federally Enforceable Through Title V Permit
- 18. Dry material spills shall be cleaned up immediately and solids disposed of properly in a manner which minimizes fugitive dust emissions. [District Rule 4102] Federally Enforceable Through Title V Permit
- 19. Daily throughput of dry material loaded through the feed hopper shall not exceed 6 tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Records of daily throughput of dry material loaded through the hopper shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-313-3

EXPIRATION D

SECTION: SW3 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

Location:

1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK T-714 WITH COMPRESSORS K-731A AND K-731B DISCHARGING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)

PERMIT UNIT REQUIREMENTS

- 1. Maximum VOC content of hydrocarbons in the vapor handling components shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content shall be tested initially and annually thereafter using methods and procedures approved by the District. VOC sampling shall be conducted under circumstances representative of normal operation. VOC content shall be analyzed using the latest version of ASTM D-1945, EPA Method 18 referenced as methane, and ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be analyzed by CARB Method 422. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the components in gas and light liquid service associated with vessel up to vapor control system truck line shall not exceed 3.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC fugitive emissions from the components in gas and light liquid service associated with compressors K-731A and K-731B shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- Tank shall vent only to vapor control system listed on S-2010-23. [District Rule 2201] Federally Enforceable Through 6. 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] Federally Enforceable Through Title V Permit
- 8. Permittee shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in this permit. Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. Determination can be made using representative sampling of common sources in the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 9. 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 Rules 1070 and 4623] Federally Enforceable Through Title V Permit

- 10. 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 1070] Federally Enforceable Through Title V Permit
- 11. 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 1070 and 4623] Federally Enforceable Through Title V Permit
- 12. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. 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 2201] Federally Enforceable Through Title V Permit
- 18. 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 2201] Federally Enforceable Through Title V Permit
- 19. 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 2201] Federally Enforceable Through Title V Permit
- 20. If a component type for the tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. 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

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

Facility Name: CHEVRON USA INC

S-2010-313-3 : Nov 16 2021 7:03AM -- RAMIREZH

Location:

LIGHT OIL WESTERN STATIONARY SOURCE

- 22. 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 2201] Federally Enforceable Through Title V Permit
- 23. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 24. 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
- 25. 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
- 26. 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
- 27. 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 recovery 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 recovery 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
- 28. 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
- 29. 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
- 30. 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
- 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 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
- 33. The permittee shall keep accurate records of VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-314-3

EXPIRATION D

SECTION: SW3 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL/WATER STORAGE TANK T-715 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)

PERMIT UNIT REQUIREMENTS

- 1. Maximum VOC content of hydrocarbons in the vapor handling components shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content shall be tested initially and annually thereafter using methods and procedures approved by the District. VOC sampling shall be conducted under circumstances representative of normal operation. VOC content shall be analyzed using the latest version of ASTM D-1945, EPA Method 18 referenced as methane, and ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be analyzed by CARB Method 422. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the components in gas and light oil service associated with vessel up to vapor control system truck line shall not exceed 3.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- 5. Tank shall vent only to vapor control system listed on S-2010-23. [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. Permittee shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in this permit. Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. Determination can be made using representative sampling of common sources in the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 8. 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 Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 9. 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 1070] Federally Enforceable 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. 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 1070 and 4623] Federally Enforceable Through Title V Permit
- 11. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. 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 2201] Federally Enforceable Through Title V Permit
- 18. 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 2201] Federally Enforceable Through Title V Permit
- 19. If a component type for the tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. 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 2201] Federally Enforceable Through Title V Refmit []]

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

- 22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 23. 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
- 24. 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
- 25. 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
- 26. 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 recovery 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 recovery 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
- 27. 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
- 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. 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
- 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 VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-315-4

EXPIRATION

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

Location:

100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10

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. 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, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- The tank and all piping, valves, and fittings shall be maintained in a leak-free condition. [District Rule 4623] Federally 3. Enforceable Through Title V Permit
- 4. A leak-free condition is a condition without a gas leak or a liquid 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 that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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
- 6. 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
- 7. 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
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of no greater than 1.4 psia 8. under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Crude oil throughput shall not exceed 16,000 barrels per emergency event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Crude oil throughput during non-emergency use shall not exceed 4 barrels per monthly average day nor 480 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit



- Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify compliance with tvp permit limit and 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 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event; 5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 6) a specific statement of the reason or cause for the occurrence; and 7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. For non-emergency use, permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. For emergency use, permittee shall maintain records showing: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; and 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 19. 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 2201] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-317-4

EQUIPMENT DESCRIPTION:

EXPIRATION DAT

25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-1128-1004) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S LIGHT 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
- 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
- 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-NOx/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.

PERMIT UNIT: S-2010-318-3

SECTION: SW3 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

EXPIRATION D

500-BBL TRANSPORTABLE FIXED ROOF CRUDE OIL PRODUCED FLUIDS STORAGE TANK DISCHARGING TO A TRANSPORTABLE VAPOR CONTROL SYSTEM CONSISTING OF CAUSTIC SCRUBBER AND A SET OF TWO 200 LB CARBON CANISTER SYSTEM IN SERIES SERVING AS A TEMPORARY REPLACEMENT EMISSIONS UNIT (TREU) FOR PERMIT UNIT S-2010-313

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 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 3. This unit shall only be used to temporarily replace an existing unit that is shut down for maintenance or repair, and may only be used in this capacity if it meets the criteria set forth for a TREU in Rule 2201, Sections 3.41.1 through 3.41.3. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. This unit shall not be located at this stationary source for more than 180 days in any 12 month period. The time spent at a maintenance or storage facility is not considered time located at the stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The total VOC emissions from the carbon canister system shall not exceed 2.0 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The carbon canister system shall be maintained in proper operating condition at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The carbon canisters removed from the system shall be sealed vapor tight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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



- 11. 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 upon startup 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. The maximum throughput of liquid shall not exceed 80 bbl per day. [District Rule 2201]
- 18. The operator shall maintain records of the daily throughput of liquid to this tank calculated on a monthly average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The operator shall maintain records of the specific equipment that this unit replaces, and of the dates and location of its operation. Operator shall maintain a record of each individual period of time and of the total time that this unit is located at this stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

ATTACHMENT B

Previous Title V Operating Permit

Permit to Operate

FACILITY: S-2010EXPIRATION DATE: 02/28/2021LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:CHEVRON USA INC
PO BOX 1392
BAKERSFIELD, CA 93302FACILITY LOCATION:LIGHT OIL WESTERN STATIONARY SOURCE
CAFACILITY DESCRIPTION:OIL AND NATURAL GAS PRODUCTION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Samir Sheikh Executive Director / APCO Brian Clements Director of Permit Services

Nov 16 2021 7:06AM -- RAMIREZH

FACILITY: S-2010-0-3

EXPIRATION DATE: 02/28/2021

FACILITY-WIDE REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 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.

Facility-wide Requirements for S-2010-0-3 (continued)

- 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
- 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). 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility-wide Requirements for S-2010-0-3 (continued)

- 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
- 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

Facility-wide Requirements for S-2010-0-3 (continued)

- 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 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
- 42. On April 30, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-4-11

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF WASH TANK WITH VAPOR RECOVERY SYSTEM SERVING TANKS S-2010-4, '10, '11, '266, '267, '291, '292, '293, AND RECEIVING CRUDE OIL FROM FACILITY S-1130, WITH COLLECTED VAPORS PIPED TO GAS PLANT S-49

- 1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery 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 Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] 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 4623] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. Fugitive emissions from tank components in vapor service, gas/liquid separator vessel, compressor skids, and shared tank vapor control piping shall not exceed 17.9 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-4-11 (continued)

- 10. 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] 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 deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. 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] Federally Enforceable Through Title V Permit
- 13. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. 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] 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 2020] Federally Enforceable Through Title V Permit
- 17. 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 the 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 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-4-11 (continued)

- 18. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. 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 4623] Federally Enforceable Through Title V Permit
- 24. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 28. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-10-5

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

210,000 GAL FIXED ROOF STORAGE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. If the API gravity of crude oil stored in this tank is equal to or greater than 30 degrees, then tank is subject to applicable requirements of Rule 4409. [District Rule 4409, 3.22] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Any tank gauging or sampling device shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute are violations of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit
- 8. The 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-10-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 a component type is found to have no leak after four consecutive quarterly inspections, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. The 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
- 16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed (except for PV valve venting on tanks not required to have a vapor recovery system). Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Sludge from tanks with a TVP of = 1.5 psia must be stored in tanks that have a vapor control efficiency of at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the 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 4623] Federally Enforceable Through Title V Permit
- 20. Allowable methods of cleaning include using steam, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-10-5 (continued)

21. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-11-5

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

210,000 GAL FIXED ROOF BALANCE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. If the API gravity of crude oil stored in this tank is equal to or greater than 30 degrees, then tank is subject to applicable requirements of Rule 4409. [District Rule 4409, 3.22] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Any tank gauging or sampling device shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute. An instrument reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute are violations of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit
- 8. The 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-11-5 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 a component type is found to have no leak after four consecutive quarterly inspections, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. The 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
- 16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed (except for PV valve venting on tanks not required to have a vapor recovery system). Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Sludge from tanks with a TVP of = 1.5 psia must be stored in tanks that have a vapor control efficiency of at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the 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 4623] Federally Enforceable Through Title V Permit
- 20. Allowable methods of cleaning include using steam, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-11-5 (continued)

21. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-12-7

EXPIRATION DATE: 02/28/2021

SECTION: 08 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

84,000 GAL FIXED ROOF WASH TANK #1 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2010-15

- The tank shall be fully enclosed and shall be equipped with a closed system that collects all VOCs from the storage tank. Collected vapors shall be routed to the gas gathering system that connects to the 17Z gas processing plant. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery 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 Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] 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 4623] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. VOC emissions from components in light oil and gas service associated with tank up to vapor control system trunk line shall not exceed 9.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. VOC emissions from the components associated with the vapor control system shall not exceed 20.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201 and 1070] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-12-7 (continued)

- 10. 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
- 11. All piping, fittings, and valves directly affixed to and within 5 ft of 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
- 12. If any of the tank components directly affixed to and within 5 ft of this tank 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
- 13. Upon detection of any leaking components directly affixed to and within 5 ft of this tank (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
- 14. Leaking components directly affixed to and within 5 ft of this tank that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type which is directly affixed to and within 5 ft of this 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
- 16. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Any component directly affixed to and within 5 ft of this tank 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
- 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
- 19. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 20. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-12-7 (continued)

- 21. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 23. 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 4623] Federally Enforceable Through Title V Permit
- 24. 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 4623] Federally Enforceable Through Title V Permit
- 25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. 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 4623] 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 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.

Permit Unit Requirements for S-2010-12-7 (continued)

- 32. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. 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 1070]

PERMIT UNIT: S-2010-15-7

EXPIRATION DATE: 02/28/2021

SECTION: 08 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

84,000 GAL FIXED ROOF PETROLEUM POWER OIL TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-12

- All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] 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 leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves directly affixed to and within 5 ft of 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 directly affixed to and within 5 ft of this tank 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 directly affixed to and within 5 ft of this tank (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

Permit Unit Requirements for S-2010-15-7 (continued)

- 8. Leaking components directly affixed to and within 5 ft of this tank that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 9. If a component type which is directly affixed to and within 5 ft of this 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. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. Any component directly affixed to and within 5 ft of this tank 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
- 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
- 13. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 14. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-15-7 (continued)

- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. 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 1070]

PERMIT UNIT: S-2010-23-35

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BARREL FIXED ROOF WASH TANK WITH VAPOR CONTROL (CAHN 3 OIL TREATING PLANT)

- 1. Except as otherwise provided in this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vapor recovery system shall be maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, 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 4623] Federally Enforceable Through Title V Permit
- 5. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. A gas or liquid leak is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. Vapor control system compressor shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District Rule 2201] Federally Enforceable Through Title V Permit
- The vapor control system shall reduce VOC emissions by at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 8. The vapor control system shall route all collected vapors to a sales pipeline. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520] Federally Enforceable Through Title V Permit
- Vapor control system shall include piping from 4 Wemcos, separators and knockouts, tanks S-2010-23, -24, -25, -26, -201, -203, -204, -205, -206, -207, -208, -209, -210, -211, -212, -213, -214, -217, -220, -221, -226, -227, -228, -229, -245, -250, -264, -313, -314, vapor compressors K-500A and K-500B, inlet scrubber V-301, knockout vessel V-302, sulfur vessels V-310 and V-311, gas/liquid separator V-101, Unicels M-210A and M-210B, vapor compressors K-731A and K-731B and air-cooled heat exchanger with separator vessel V-303. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Volume of separator vessel V-303 shall not exceed 100 bbls. [District Rule 2020] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-23-35 (continued)

- 12. The Unicel water treatment vessels M-210A and M-210B may be open to the atmosphere if the piping connecting them to the vapor control system is closed and leak-free. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Fugitive VOC emission rate from vapor control system shall not exceed 220.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. Only operators who elect to participate in the voluntary tank preventive inspection and maintenance, and tank interior cleaning program (program) shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5. When using Tables 3 to 5 and Section 5.7.5 provisions, operators shall perform the procedures as expeditiously as practicable and minimize emissions to the maximum extent practicable. To participate in this program, the operator shall comply with the requirements of Sections 5.7.1 through 5.7.4. [District Rule 4623] 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 18. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 19. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 20. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 21. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 22. 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 4623, 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.

Permit Unit Requirements for S-2010-23-35 (continued)

- 23. 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 4623, Table 3] 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 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 4623] 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 27. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. 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 4623] Federally Enforceable Through Title V Permit
- 32. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-23-35 (continued)

- 35. 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) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain with the permit accurate fugitive component counts and the resulting emissions calculated using U.S. EPA document "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors, and shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Records of all required monitoring data and support information shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rules 1070, 2520 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-24-7

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF WASH TANK T-102 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-24-7 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. 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

PERMIT UNIT: S-2010-25-8

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BBL FIXED ROOF WASH/REJECT/SHIPPING TANK T-103 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - (CAHN 3)

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-25-8 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-26-6

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BBL FIXED ROOF SHIPPING/REJECT TANK T-104 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-26-6 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-142-20

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#T-3) CONNECTED TO VAPOR CONTROL SYSTEM CONSISTING OF FOUR VAPOR COMPRESSOR SKIDS, TANK BLANKET GAS SCRUBBER, AND VAPOR PIPING (LOCATED AT 32 U.S. OIL CLEANING PLANT)

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. The vapor control system shall be APCO-approved and maintained in leak-free condition. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- The following tanks shall be connected to vapor control system: S-2010-142 (T-3), S-2010-143 (T-8), S-2010-144 (T-12), S-2010-146 (T-2), S-2010-148 (T-7), S-2010-223 (T-12A), S-2010-224 (T-8A), and S-2010-297 (T-301).
 [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Vapor control system shall consist of vapor collection piping and four vapor compressor skids. Each vapor compressor skid shall consist of one compressor, liquid knockout vessel(s) and/ or scrubber(s), condensate and/ or lube oil pump(s). Vapors are sent to sales gas pipeline or used as a tank blanket gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain accurate component count for tank, compressor skids, and tank vapor control piping according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit</p>
- 5. Fugitive emissions from tank, compressor skids, and tank vapor control piping shall not exceed 2.4 lb VOC/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623, 5.6.1] 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
- If the source can demonstrate compliance with the provisions of Rule 4623, Section 5.7 (amended 5/19/05), then any deviations that are addressed under the provisions of Tables 3 through 5 shall not be in violation of Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-142-20 (continued)

- 11. 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. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 12. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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
- 16. 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 shall 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
- 17. 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, Section 5.7 (amended 12/20/01). 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, Section 5.7 (amended 12/20/01). [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 18. 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
- Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, Section 5.7 (amended 12/20/01), even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Except as otherwise provided in this permit, 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
- 22. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-143-6

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

84,546 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-8 WITH VAPOR CONTROL SYSTEM LISTED UNDER S-2010-142

- 1. Tank shall be connected to vapor control system S-2010-142. [District Rule 4623] 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, 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
- 4. Except as otherwise provided in this permit, all piping valves and fittings shall be constructed and maintained in a leak-free condition [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 7. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-143-6 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 16. 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

PERMIT UNIT: S-2010-144-4

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-12 WITH VAPOR CONTROL (32 US OIL CLEANING PLANT)

- 1. Tank shall be connected to vapor control system S-2010-142. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, tank gauging and sampling devices shall be equipped with leak-free covers which shall remain closed at all times except during gauging and sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 6. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-144-4 (continued)

- 10. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. 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

PERMIT UNIT: S-2010-146-4

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-2 WITH VAPOR CONTROL (32 US OIL CLEANING PLANT)

- 1. Tank shall be connected to vapor control system S-2010-142. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, tank gauging and sampling devices shall be equipped with leak-free covers which shall remain closed at all times except during gauging and sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 6. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-146-4 (continued)

- 10. Except as otherwise provided in this permit, any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. 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

PERMIT UNIT: S-2010-148-7

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

16,507 GALLON (393 BBL) FIXED ROOF CRUDE OIL DRAIN TANK (#T-7) CONNECTED TO VAPOR CONTROL SYSTEM REFERENCED ON S-2010-142 (LOCATED AT 32 U.S. OIL CLEANING PLANT)

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 5. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7 (amended 5/19/05), then any deviations that are addressed under the provisions of Table 3 through 6 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak-free. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-148-7 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 18. Except as otherwise provided in this permit, any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 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
- 20. Except as otherwise provided in this permit, 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
- 21. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-198-6

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

10.5 MMBTU/HR NATURAL GAS-FIRED TANK HEATING BOILER #401 WITH A POWER FLAME MODEL NVC6-G-30 LOW NOX BURNER

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal monitoring and recordkeeping shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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 1070] Federally Enforceable Through Title V Permit
- 8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 9. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. 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
- 11. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmv NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 115 ppmv CO @ 3% O2 or 0.084 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-198-6 (continued)

- 13. 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 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 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 17. 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 and 4306] Federally Enforceable Through Title V Permit
- 18. Source testing to measure natural gas-combustion NOx 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 and 4306] Federally Enforceable Through Title V Permit
- 19. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. 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
- NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-198-6 (continued)

- 24. 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 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. This unit is not used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the requirements of District Rule 4301 (Amended December 17, 1992) 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
- 27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 28. 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, and 4306] Federally Enforceable Through Title V Permit
- 29. Pursuant to Rule 4320, 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
- 30. 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
- 31. Formerly S-1128-391.

PERMIT UNIT: S-2010-199-6

EXPIRATION DATE: 02/28/2021

SECTION: 03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

10.5 MMBTU/HR NATURAL GAS FIRED TANK HEATING BOILER #B402, WITH A POWER FLAME NOVA PLUS MODEL NVCR6-G-30 LOW NOX BURNER (SERIAL # 120519797)

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal monitoring and recordkeeping shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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 1070] Federally Enforceable Through Title V Permit
- 8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 9. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. 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
- 11. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00214 lb-SOx/MMBtu or 0.75 gr-S/100 scf, 0.0076 lb-PM10/MMBtu, 115 ppmvd CO @ 3% O2 or 0.084 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-199-6 (continued)

- 13. 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 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 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 17. 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 and 4306] Federally Enforceable Through Title V Permit
- 18. Source testing to measure natural gas-combustion NOx 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 and 4306] Federally Enforceable Through Title V Permit
- 19. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. 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
- NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-199-6 (continued)

- 24. 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 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. This unit is not used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the requirements of District Rule 4301 (Amended December 17, 1992) 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
- 27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 28. 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, and 4306] Federally Enforceable Through Title V Permit
- 29. Pursuant to Rule 4320, 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
- 30. 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
- 31. Formerly S-1128-392.

PERMIT UNIT: S-2010-200-11

EXPIRATION DATE: 02/28/2021

SECTION: SW29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

30.0 MMBTU/HR STRUTHERS NATURAL GAS, PROPANE, AND BUTANE FIRED PORTABLE STEAM GENERATOR S/N 75/76-37153-2 A WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER. PERMITTED AS S-1128-952 IN WESTERN HEAVY OIL STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

- 1. 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 Rule2080] Federally Enforceable Through Title V Permit
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. 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
- 6. 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 1070]
- 7. 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
- 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 NSR Rule] Federally Enforceable Through Title V Permit
- 9. 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 NSR Rule] Federally Enforceable Through Title V Permit
- 10. Production from wells thermally enhanced by this steam generator shall be routed only to existing vapor controlled tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
- 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
- 12. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 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.

Permit Unit Requirements for S-2010-200-11 (continued)

- 13. The duration of each startup and shutdown period shall not exceed 2.0 hours. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. 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 NSR Rule and Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. Source testing for NOx and CO for each approved fuel shall be conducted within 60 days of first firing on fuel. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with NOx and CO emission limits shall be demonstrated not less than once every 36 months if compliance is demonstrated on two consecutive annual compliance tests. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. 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
- 21. The following test methods shall be used: NOx (lb/MMBtu) EPA Method 19, NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, PM10 EPA Method 5, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 22. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. 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 an approved portable emission 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
- 24. 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 the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. 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

Permit Unit Requirements for S-2010-200-11 (continued)

- 26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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
- 27. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule1081] Federally Enforceable Through Title V Permit
- 28. Copies of all fuel invoices, 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 and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
- 30. 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
- 31. 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
- 32. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8 or ARB Method 1-100; 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 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
- 33. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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 D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 34. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2, 4305, 6.2.1, and 4306] Federally Enforceable Through Title V Permit
- 35. 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 Kern County Rule 407] Federally Enforceable Through Title V Permit
- Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 37. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-200-11 (continued)

- 38. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 39. 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, 9.4.2] Federally Enforceable Through Title V Permit
- 40. Unit shall not be located within 1000 ft of a school. [CH&SC 42301.6]
- 41. Pursuant to Rule 4320, 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
- 42. 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
- 43. Formerly S-1128-927.

PERMIT UNIT: S-2010-201-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PRODUCED WATER TANK T-201 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-201-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-203-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PRODUCED WATER TANK T-203 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-203-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-204-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF DRAIN OVERFLOW TANK T-204 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-204-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-205-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FILTER BACKWASH TANK T-504 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-205-3 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. 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

PERMIT UNIT: S-2010-206-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF TANK T-500 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-206-3 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. 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

PERMIT UNIT: S-2010-207-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF TANK T-501 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-207-3 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. 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

PERMIT UNIT: S-2010-208-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF FILTER WATER TANK T-502 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-208-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-209-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF WATER TANK T-503 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 9. Upon detection of a liquid leak 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 4623, 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.

Permit Unit Requirements for S-2010-209-3 (continued)

- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 17. 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

PERMIT UNIT: S-2010-210-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF FILTER BACKWASH TANK T-505 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-210-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-211-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

6,500 BBL FIXED ROOF WASTEWATER TANK T-201B VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-211-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-212-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

29,000 BBL FIXED ROOF PRODUCED WATER TANK T-205 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-212-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-213-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

9,600 BBL FIXED ROOF PRODUCED WATER TANK T-206 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-213-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-214-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,700 BBL FIXED ROOF PRODUCED WATER TANK T-207 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3

- 1. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 3. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-214-3 (continued)

- 9. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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
- 16. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-217-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

5000 BBL FIXED-ROOF WASH TANK T-105 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23

- 1. Tank shall operate at constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 4. If the source can demonstrate compliance with the provisions of Rule 4623 Section 5.7, then any deviations that are addressed under the provisions of Table 3 through 5 shall not be in violation of this permit. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, this tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-217-3 (continued)

- 10. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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
- 17. Except as otherwise provided in this permit, 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
- 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

PERMIT UNIT: S-2010-219-5

EXPIRATION DATE: 02/28/2021

SECTION: SW 3 TOWNSHIP: T27S RANGE: R21E

EQUIPMENT DESCRIPTION:

SAND AND SOLIDS SEPARATION OPERATION WITH TWO 17,682 GALLON BELOW GRADE BASINS , 28' WIDE BY 75' LONG WITH SLOPING BOTTOM FROM 0' TO 4' DEEP AND 3' OVERFLOW WEIR, ONE 10,200 GALLON TRENCH, 8' WIDE BY 57' LONG BY 6' DEEP

- Sand basins and trench shall be covered at all times by sunscreen tarps except when empty of all petroleum containing materials or during maintenance and clean out operations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. VOC emissions from this operation shall not exceed 23.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Sand basins shall not receive material on continuous basis. Continuous basis means receiving material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds or impoundments. [District Rule 4402] Federally Enforceable Through Title V Permit
- 4. Sand basins shall receive only liquids and solids generated from oil production operations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Permittee shall pump off fluids from overflow trench to maintain the level in the trench at it's minimum practical level. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Solids removed from basins shall only be disposed of at an approved disposal site or recycling facility or be used to make road base for use on roads owned or maintained by Chevron USA. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-220-8

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,300 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-208) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- 1. Tank vapors space shall vent only to the vapor control system identified on S-2010-23. [District NSR Rule and District Rules 4623] Federally Enforceable Through Title V Permit
- 2. Vapor control system efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Tank safety pressure relief valve(s) shall be set to open only when tank vapor space pressure is higher than vapor control system compressor activation pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Tank vapor space appurtenances shall be maintained leak-free as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all tank gauging or sampling devices, relief valves, manholes, etc. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 9. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 3.17] Federally Enforceable Through Title V Permit
- 10. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-220-8 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 19. Except as otherwise provided in this permit, 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
- 20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 21. Interior tank cleaning shall be performed in accordance with provisions specified in Table 3 of Rule 4623. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 22. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. 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.

PERMIT UNIT: S-2010-221-3

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

500 BARREL FIXED ROOF PRODUCED WATER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23

PERMIT UNIT REQUIREMENTS

- 1. Tank shall operate at constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, all tank gauging or sampling devices, relief valves, manholes, etc. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 5. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 3.17] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] 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 4623, 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.

Permit Unit Requirements for S-2010-221-3 (continued)

- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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

PERMIT UNIT: S-2010-223-3 SECTION: NW32 TOWNSHIP: 26S RANGE: 21E EQUIPMENT DESCRIPTION: 2,500 BBL CRUDE OIL WASH TANK (#T-12A)

PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 02/28/2021

Permit Unit Requirements for S-2010-223-3 (continued)

- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Upon detection of a liquid leak 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table
 3] Federally Enforceable Through Title V Permit
- 18. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 20. Except as otherwise provided in this permit, 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
- 21. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-224-4

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

2000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-8A WITH VAPOR CONTROL SYSTEM LISTED IN S-2010-142

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 0.5 lb/ day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. A leak-free condition is defined as a condition without a gas leak or a liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 9. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-224-4 (continued)

- 12. Permit holder shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 13. Permit holder shall comply with all applicable Tank Interior Cleaning Program requirements specified in Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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
- 16. 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
- 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
- 18. Except as otherwise provided in this permit, 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
- 19. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-226-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

2,300 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-208A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-226-4 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table
 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

PERMIT UNIT: S-2010-227-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-227-4 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

PERMIT UNIT: S-2010-228-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209-B) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-228-4 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

PERMIT UNIT: S-2010-229-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK (T-210) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-2010-23

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 2. All 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 3. All piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is defined as a condition without a gas leak or a liquid 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. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623, and shall be reported as a deviation. A liquid leak is defined as the dripping of an organic liquid at a rate of greater than 3 drops per minute. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- 5. Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District NSR Rule] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-229-4 (continued)

- 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 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
- 14. The control efficiency of any VOC destruction device, measured and calculated as carbon, 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
- 15. Fugitive VOC emission rate shall not exceed that listed in S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 18. Interior tank cleaning shall be performed in accordance with provisions specified in Rule 4623. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 20. 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

PERMIT UNIT: S-2010-245-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-106) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

- Tank shall vent only to vapor control system listed on permit S-2010-23. [District NSR Rule and District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 4. Daily fugitive VOC emission rate shall not exceed 4.4 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District NSR Rule and District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-245-4 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 17. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 18. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 19. 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 4623, 5.7] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-245-4 (continued)

- 20. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 21. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 22. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 24. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 25. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 26. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 27. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623, 5.7] Federally Enforceable Through Title V Permit
- 28. 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

PERMIT UNIT: S-2010-250-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-107) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

- Tank shall vent only to vapor control system listed on permit S-2010-23. [District NSR Rule and District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
- 2. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 4. Daily fugitive VOC emission rate shall not exceed 4.4 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District NSR Rule and District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- Except as otherwise provided in this permit, 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 9. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-250-4 (continued)

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 17. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 18. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 19. 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 4623, 5.7] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-250-4 (continued)

- 20. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 21. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 22. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 23. 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 4623, 5.7] Federally Enforceable Through Title V Permit
- 24. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 25. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 26. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 27. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623, 5.7] Federally Enforceable Through Title V Permit
- 28. 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

PERMIT UNIT: S-2010-264-4

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

18,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-211) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)

- 1. Tank shall vent only to vapor control system listed on permit S-2010-23. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Vapor control system compressor shall activate before the pressure relief valve on this tank vents. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions rate shall be calculated using the Oil and Gas Production Operations Average Emission Factors, EPA Protocol for Equipment Leak Emission Estimates, Table 2-4, (EPA-453/R-95-017) November 1995 from the total number of vapor components and light oil (i.e. oil with an API gravity of 30 degrees or greater) liquid components associated with tank and equipment specified on this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR] Federally Enforceable Through Title V Permit
- 5. Daily fugitive VOC emission rate shall not exceed 4.6 lb-VOC/day. [District NSR Rule] 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 and 40 CFR 60.110(b)] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 to ensure the appropriate TVP test method is used. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
- 9. 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
- 10. 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

Permit Unit Requirements for S-2010-264-4 (continued)

- 11. For crude oil with an API gravity greater than 26 degrees, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), 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 with the procedures in District Rule 4623, Appendix B. As an alternative to using ASTM D 323-94, 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 US EPA. [District Rule 4623, 6.4.3] 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 Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
- 13. In lieu of testing each uncontrolled fixed roof tank, an operator may conduct a TVP testing of a representative tank provided the following criteria are met: (1) The selection of representative, uncontrolled fixed roof tanks is submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) One uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (3) the representative uncontrolled fixed roof tank shall be the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells; (4) The stored organic liquid in each of the represented tanks is the same and came from the same source; and (5) The TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. 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
- 16. 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
- 17. 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
- 18. 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
- 19. 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 for S-2010-264-4 (continued)

- 20. 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
- 21. 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
- 22. 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, 9.4.1] Federally Enforceable Through Title V Permit
- 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 one of the following methods (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) 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) 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. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
- 28. 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
- 29. 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
- 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

PERMIT UNIT: S-2010-266-4

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

100 BBL FIXED ROOF DRAIN TANK (T-4) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4

- The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District NSR Rule, Rule 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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
- 5. 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
- 6. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. 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
- 8. 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

Permit Unit Requirements for S-2010-266-4 (continued)

- 9. 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
- 10. 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
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. Fugitive emissions from tank components shall not exceed 9.1 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-266-4 (continued)

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-267-4

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF SLOP OIL TANK (T-5) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4

- The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District NSR Rule, Rule 4623] Federally Enforceable Through Title V Permit
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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
- 5. 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
- 6. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization of this rule. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. 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
- 8. 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

Permit Unit Requirements for S-2010-267-4 (continued)

- 9. 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
- 10. 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
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. Fugitive emissions from tank components shall not exceed 6.4 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. 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 the 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 4623] Federally Enforceable Through Title V Permit
- 16. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-267-4 (continued)

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 26. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-268-3 SECTION: SW08 TOWNSHIP: 30S RANGE: 22E EQUIPMENT DESCRIPTION: 91 BBL CRUDE OIL VESSEL WITH PRV (8Z NEMU)

PERMIT UNIT REQUIREMENTS

- 1. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 2. Any vessel gauging or sampling devices(s) shall be equipped with a leak-free cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.5 psia [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Vessel liquid throughput shall not exceed 2000 barrels per day and 18,250 barrels per year. [District NSR Rule] Federally Enforceable Through Title V Permit
- Fugitive emissions from tank liquid service components shall not exceed 4.7 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak 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 4623, Table 3] 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 02/28/2021

Permit Unit Requirements for S-2010-268-3 (continued)

- 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 4623, Table 3] 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 1070] Federally Enforceable Through Title V Permit
- 14. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 15. Interior vessel cleaning shall be performed in accordance with provisions specified in Section 5.7.5.3 of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 22. 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 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-288-5

EXPIRATION DATE: 02/28/2021

SECTION: 29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

62.5 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 SPECIFIED LOCATIONS

- 1. 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
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. 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
- 6. 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 1070] Federally Enforceable Through Title V Permit
- 7. 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
- This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE or SW 1/4 Section 32, T26S/R21E, and NW or SW 1/4 Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
- 9. 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 1070] Federally Enforceable Through Title V Permit
- 10. Flue gas recirculation (FGR) shall be utilized as necessary in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. 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

- 12. Emission rates, except during startup and shutdown shall not exceed: NOx (as NO2): 7 ppmvd @ 3% O2 or 0.008 lb/MMBtu; or CO: 25 ppmvd @ 3% O2 or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. Emission rates shall not exceed any of the following: PM10: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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
- 15. Permittee shall maintain a record of the duration of each startup and shutdown of this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. Emission rates during startup and shutdown shall not exceed: NOx 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
- 17. Emissions rate of NOx shall not exceed 45.0 lb/day nor 4380 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Emissions rate of CO shall not exceed 97.1 lb/day nor 10,129 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD or double GC performed in the laboratory. [District Rules 1070, 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
- 20. 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 Rules 1070, 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
- 21. 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 Rules 1070, 2201,2520, and 4320] Federally Enforceable Through Title V Permit
- 22. 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 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 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. 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 the performing the notification and testing required by this condition. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 24. 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 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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 Rule s 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (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
- 28. Source testing to measure natural gas-combustion NOx 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 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. 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
- 30. 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
- 31. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (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, SOx (lb/MMBtu) ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. 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
- 33. 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 District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 34. 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
- 35. 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 noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

36. All records shall be maintained and retained on-site for a minimum period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-291-2

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700A) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

- 1. The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2010-292-2

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700B) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

- 1. The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-293-2

EXPIRATION DATE: 02/28/2021

SECTION: 15 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-710) RECEIVING FLUID FROM TWO UNVENTED LIQUID FILTER VESSELS AND SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4

- 1. The tank shall be connected to the vapor recovery system listed on S-2010-4 consisting of a closed vent system that collects VOCs from the storage tank, and a VOC control device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test methods specified in Rule 4623, Section 6.4.6. [District Rule 2201, Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, fittings and tank roof appurtenances shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. 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
- 4. 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 4623] Federally Enforceable Through Title V Permit
- 5. Fugitive emissions from tank components in vapor service, compressor skids, and shared tank vapor control piping shall not exceed 10.7 lb VOC/ day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. 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] Federally Enforceable Through Title V Permit
- 9. 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] Federally Enforceable Through Title V Permit

- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule. 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 deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit
- 12. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 30 drops per minute shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate equal to or greater than 3 and less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] 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 the 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 4623] Federally Enforceable Through Title V Permit
- 17. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by 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) tank shall be degassed before commencing interior cleaning 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) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a 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) tank shall be degassed before commencing interior cleaning 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 4623] 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 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

- 20. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
- 27. 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 Emissions Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of dates of periodic tank inspections, start and completion dates/times of tank cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-294-3

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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
- 3. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District NSR Rule] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. 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 NSR Rule] Federally Enforceable Through Title V Permit
- 9. 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 Rule4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, Table 3] Federally Enforceable Through Title V Permit

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. If tank is left on site for more than six months, permittee shall notify the APCO in writing at least three (3) days prior to performing tank interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank, 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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.

PERMIT UNIT: S-2010-295-3

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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
- 3. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District NSR Rule] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. 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 NSR Rule] Federally Enforceable Through Title V Permit
- 9. 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 Rule4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, Table 3] Federally Enforceable Through Title V Permit

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
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- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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

PERMIT UNIT: S-2010-296-3

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)

PERMIT UNIT REQUIREMENTS

- 1. The equipment shall not be located within 1,000 feet of the outer boundary of any K-12 school. [CH&SC 42301.6]
- 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
- 3. This vessel shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the vessel, be permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District NSR Rule & 4623] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling devices(s) shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except for gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. True vapor pressure of any organic liquid introduced to the vessel shall be less than 6.17 psia [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Vessel liquid throughput shall not exceed 150 barrels per day and 54,750 barrels per year. [District NSR Rule] Federally Enforceable Through Title V Permit
- Fugitive emissions from vessel liquid service components shall not exceed 3.2 lb/VOC/day based on EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emissions Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. 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 NSR Rule] Federally Enforceable Through Title V Permit
- 9. 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 Rule4623, Table 3] Federally Enforceable Through Title V Permit
- 10. 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 4623, Table 3] Federally Enforceable Through Title V Permit

- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. If tank is left on site for more than six months, permittee shall notify the APCO in writing at least three (3) days prior to performing tank interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank, 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) 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 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

- 22. If tank is left on site for more than six months and contained organic liquid with a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of dates of periodic vessel inspections, start and completion dates/times of vessel cleaning activities, and methods of cleaning used. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep accurate records of each organic liquid stored in the vessel including its TVP, API gravity, and throughput 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
- 25. Permittee shall conduct API gravity, true vapor pressure (TVP) testing of the organic liquid stored in this vessel, or a representative vessel as provided in Section 6.2.2 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 vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the vessel 's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 20 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the vessel . [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Instead of testing each uncontrolled vessel, the permittee may conduct a TVP test of the organic liquid stored in a representative vessel 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
- 29. 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.

PERMIT UNIT: S-2010-297-2

EXPIRATION DATE: 02/28/2021

SECTION: NW32 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-301 WITH VAPOR CONTROL SYSTEM LISTED 0N S-2010-142

- 1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emissions from tank shall be less than 1.0 lb/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The vapor control system shall reduce VOC emissions by at least 95%. [District Rule 4623] 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. Except as otherwise provided in this permit, tank roof appurtenances shall be maintained leak free. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
- 8. 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. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
- 9. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 11. Permit holder shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit

- 12. Permit holder shall comply with all applicable Inspection and Maintenance requirements specified in Table 3 of Rule 4623. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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 1070]

PERMIT UNIT: S-2010-308-2

EXPIRATION DATE: 02/28/2021

SECTION: 29 TOWNSHIP: 26S RANGE: 21E

EQUIPMENT DESCRIPTION:

TEOR SYSTEM WITH UP TO 130 STEAM ENHANCED WELLS OPERATED WITH CLOSED CASING VENTS, PERMIT EXEMPT WELL TESTERS, PRESSURE VESSELS, RELIEF TANK, AND MASTER TRAP(S) VENTED TO H2S REMOVAL SYSTEM AND THE FIELD GAS GATHERING PIPELINE

- 1. Operation of H2S scrubber is optional. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
- 3. Emissions rate of VOC associated with the fugitive emissions from TEOR system and ancillary equipment 94.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Production from TEOR operation shall be sent only to tanks equipped with 99% vapor control. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 5. This permit authorizes 10 leaks exceeding an instrument reading of 10,000 ppmv. Leaks greater in number than 10 and exceeding 10,000 ppmv are a violation of this permit. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 6. Except as otherwise provided in this permit, casing vent valves shall be closed and plugged. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 7. Permittee shall maintain records of the date and well identification where steam injection or well stimulation occurs, current list of all thermally enhanced production wells associated with this operation, permit numbers of tanks receiving production from the TEOR operation, leak inspection results, and accurate fugitive component counts of components in gas service and resulting emissions calculated using the emission factors in the CAPCOA California 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 (Feb 1999). [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 8. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally Enforceable Through Title V Permit
- 9. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, 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 the steam-enhanced crude oil production well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.1 and 5.5.2] Federally Enforceable Through Title V Permit

- 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 an 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 as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
- 11. 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 a 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] Federally Enforceable Through Title V Permit
- 12. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
- 13. Each hatch shall be 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 5.7.2] Federally Enforceable Through Title V Permit
- 14. An operator shall comply with the requirements of Section 6.7 of Rule 4401 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
- 15. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401 5.8.1] Federally Enforceable Through Title V Permit
- 16. An operator 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 this rule 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 5.8.2] Federally Enforceable Through Title V Permit
- 17. In addition to the inspections required by Section 5.8.1 of 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 4 of Rule 4401. [District Rule 4401 5.8.3] Federally Enforceable Through Title V Permit
- 18. In addition to the inspections required by Sections 5.8.1, 5.8.2 and 5.8.3 of 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 Section 5.8.4.1 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 5.8.4] Federally Enforceable Through Title V Permit
- 19. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401 5.8.5] Federally Enforceable Through Title V Permit

- 20. 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
- 21. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit
- 22. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit
- 23. An operator 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 5.9.3] Federally Enforceable Through Title V Permit
- 24. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an 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 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
- 25. 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
- 26. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit
- 27. The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit
- 28. 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 5.9.7] Federally Enforceable Through Title V Permit
- 29. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit
- 30. 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 as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit
- 31. The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit
- 32. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401 6.1.5] Federally Enforceable Through Title V Permit

- 33. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401 6.1.6] Federally Enforceable Through Title V Permit
- 34. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit
- 35. 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
- 36. 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
- 37. An operator shall source test annually all vapor collection and control systems used to control emissions from steamenhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. 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. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit
- 38. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit
- 39. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit
- 40. An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit
- 41. 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 6.3.1] Federally Enforceable Through Title V Permit
- 42. 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 6.3.2] Federally Enforceable Through Title V Permit
- 43. 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 6.3.3] Federally Enforceable Through Title V Permit

- 44. 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 6.3.5] Federally Enforceable Through Title V Permit
- 45. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. 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. the date of repair, replacement, or removal from operation of leaking components, identify 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, methods used to minimize the leak concentration in ppmv after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, 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 6.4] Federally Enforceable Through Title V Permit

 PERMIT UNIT: S-2010-309-1
 EXPIRATION DATE: 02/28/2021

 SECTION: SW 3
 TOWNSHIP: 27S
 RANGE: 21E

 EQUIPMENT DESCRIPTION:
 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

 PERMIT UNIT: S-2010-310-1
 E

 SECTION: SW 3
 TOWNSHIP: 27S
 RANGE: 21E

 EQUIPMENT DESCRIPTION:
 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

PERMIT UNIT REQUIREMENTS

- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

EXPIRATION DATE: 02/28/2021

PERMIT UNIT: S-2010-311-1 SECTION: SW 3 TOWNSHIP: 27S RANGE: 21E EQUIPMENT DESCRIPTION: 1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN

PERMIT UNIT REQUIREMENTS

EXPIRATION DATE: 02/28/2021

- 1. VOC emissions from this operation shall not exceed 9.6 lb/day. [District Rule 2201]
- 2. Vacuum truck unloading sand basin shall only operate periodically and not continuously. [District Rule 4402]
- 3. Vacuum truck unloading sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201]
- 4. During the clean out operation, the solids and liquids shall be removed from the vacuum truck unloading sand basin in a timely manner to minimize VOC emissions. [District Rule 2201]
- 5. The exposed liquid surface area shall not exceed 1,600 sq.ft. [District Rule 2201]
- 6. Vacuum truck unloading sand basin shall not receive new material on a continuous basis. Continuous basis means receiving new material through a permanent or non-permanent pipeline connection from a tank or other storage device, including pits, pounds, or impoundments. This requirement does not apply to the onsite handling of existing material originally unloaded at the unloading station. [District Rule 4402]

S-2010-311-1 : Nov 16 2021 7:07AM -- RAMIREZH

PERMIT UNIT: S-2010-312-2

EXPIRATION DATE: 02/28/2021

SECTION: SW3 TOWNSHIP: T27S RANGE: 21E

EQUIPMENT DESCRIPTION:

DEWATERING AND OIL RECOVERY OPERATION WITH DRY MATERIAL HOPPER ME-722 SERVED BY DUST COLLECTOR, 1000 GALLON POLYMER TANK T-721, MACERATOR, SOLIDS CONVEYOR(S), 1000 BBL SLURRY MIXING TANK T-711, CENTRISYS CA21-4 HC THREE PHASE CENTRIFUGE (OR EQUIVALENT), SOLIDS DISCHARGE CONVEYOR AND TEMPORARY SOLIDS STORAGE PAD (CAHN 3 OIL TREATING PLANT)

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 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the dust collector serving hopper shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Dust collector serving hopper shall be in operation whenever bags are loaded to the hopper. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 4. The dust collector shall be maintained and operated according to manufacturer's specifications. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 5. The dust collector cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 6. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 7. The dust collector shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 8. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Centrifuge liquids shall only be sent to vapor controlled tanks S-2010-313 and '-314. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Centrifuge shall be enclosed except for solids discharge opening. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Centrifuge solids shall be sent only to temporary solids storage pad prior to load-out. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Slurry mixing tank T-711 shall receive material from vacuum truck unloading basins S-2101-309 through '-311, hopper, polymer tank T-721, and shall be enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Conveyor from hopper to slurry tank shall be enclosed and include flexible spout at slurry tank inlet. [District Rule 2201] Federally Enforceable Through Title V Permit

- 14. PM10 emissions from hopper shall not exceed 0.0011 lb/ton of dry material loaded through the feed hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Emissions from the dewatering and oil recovery operation shall not exceed any of the following limits: 0.1 lb-PM10/day or 2.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Dry material additive sacks shall be opened only inside enclosed hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Dry material additive sacks shall be disposed of immediately after use and in a manner that minimizes fugitive dust emissions. [District Rule 4102] Federally Enforceable Through Title V Permit
- 18. Dry material spills shall be cleaned up immediately and solids disposed of properly in a manner which minimizes fugitive dust emissions. [District Rule 4102] Federally Enforceable Through Title V Permit
- 19. Daily throughput of dry material loaded through the feed hopper shall not exceed 6 tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Records of daily throughput of dry material loaded through the hopper shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-313-2

EXPIRATION DATE: 02/28/2021

SECTION: SW3 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK T-714 WITH COMPRESSORS K-731A AND K-731B DISCHARGING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)

- 1. Maximum VOC content of hydrocarbons in the vapor handling components shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content shall be tested initially and annually thereafter using methods and procedures approved by the District. VOC sampling shall be conducted under circumstances representative of normal operation. VOC content shall be analyzed using the latest version of ASTM D-1945, EPA Method 18 referenced as methane, and ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be analyzed by CARB Method 422. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the components in gas and light liquid service associated with vessel up to vapor control system truck line shall not exceed 3.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC fugitive emissions from the components in gas and light liquid service associated with compressors K-731A and K-731B shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- 6. Tank shall vent only to vapor control system listed on S-2010-23. [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] Federally Enforceable Through Title V Permit
- 8. Permittee shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in this permit. Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. Determination can be made using representative sampling of common sources in the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 9. 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 Rules 1070 and 4623] Federally Enforceable Through Title V Permit

- 10. 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 1070] Federally Enforceable Through Title V Permit
- 11. 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 1070 and 4623] Federally Enforceable Through Title V Permit
- 12. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. 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 2201] Federally Enforceable Through Title V Permit
- 18. 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 2201] Federally Enforceable Through Title V Permit
- 19. 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 2201] Federally Enforceable Through Title V Permit
- 20. If a component type for the tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. 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

Permit Unit Requirements for S-2010-313-2 (continued)

- 22. 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 2201] Federally Enforceable Through Title V Permit
- 23. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 24. 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
- 25. 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
- 26. 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
- 27. 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 recovery 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 recovery 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
- 28. 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
- 29. 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
- 30. 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
- 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 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
- 33. The permittee shall keep accurate records of VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-314-2

EXPIRATION DATE: 02/28/2021

SECTION: SW3 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL/WATER STORAGE TANK T-715 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)

- 1. Maximum VOC content of hydrocarbons in the vapor handling components shall not exceed 50% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content shall be tested initially and annually thereafter using methods and procedures approved by the District. VOC sampling shall be conducted under circumstances representative of normal operation. VOC content shall be analyzed using the latest version of ASTM D-1945, EPA Method 18 referenced as methane, and ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be analyzed by CARB Method 422. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the components in gas and light oil service associated with vessel up to vapor control system truck line shall not exceed 3.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain with the permit an accurate fugitive component count and the resulting emissions calculated pursuant to EPA document, "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- 5. Tank shall vent only to vapor control system listed on S-2010-23. [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. Permittee shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in this permit. Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. Determination can be made using representative sampling of common sources in the first line tank (or tanks) in a tank battery that is first receiving the produced fluids (mixture of oil, water, and gases) from the crude oil production wells. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 8. 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 Rules 1070 and 4623] Federally Enforceable Through Title V Permit
- 9. 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 1070] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-314-2 (continued)

- 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 1070 and 4623] Federally Enforceable Through Title V Permit
- 11. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. 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 2201] Federally Enforceable Through Title V Permit
- 18. 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 2201] Federally Enforceable Through Title V Permit
- 19. If a component type for the tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 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 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. Permit Unit Requirements for S-2010-314-2 (continued)

- 22. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 23. 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
- 24. 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
- 25. 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
- 26. 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 recovery 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 recovery 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
- 27. 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
- 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. 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
- 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 VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-315-3

EXPIRATION DATE: 02/28/2021

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10

- 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. 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, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. The tank and all piping, valves, and fittings shall be maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. A leak-free condition is a condition without a gas leak or a liquid 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 that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. 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
- 6. 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
- 7. 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
- 8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of no greater than 1.4 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Crude oil throughput shall not exceed 16,000 barrels per emergency event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Crude oil throughput during non-emergency use shall not exceed 4 barrels per monthly average day nor 480 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-315-3 (continued)

- Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify compliance with tvp permit limit and 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 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event; 5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 6) a specific statement of the reason or cause for the occurrence; and 7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. For non-emergency use, permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. For emergency use, permittee shall maintain records showing: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; and 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 19. 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 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-317-3

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

- 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
- 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-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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. Permit Unit Requirements for S-2010-317-3 (continued)

- 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

PERMIT UNIT: S-2010-318-2

EXPIRATION DATE: 02/28/2021

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

500 BBL TRANSPORTABLE FIXED ROOF CRUDE OIL PRODUCED FLUIDS STORAGE TANK DISCHARGING TO A TRANSPORTABLE VAPOR CONTROL SYSTEM CONSISTING OF CAUSTIC SCRUBBER AND A SET OF TWO 200 LB CARBON CANISTER SYSTEM IN SERIES SERVING AS A TEMPORARY REPLACEMENT EMISSIONS UNIT (TREU) FOR PERMIT UNITS S-2010-313 OR S-2010-314

- 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 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- This unit shall only be used to temporarily replace tank S-2010-313 or '-314 when they are shut down for maintenance or repair, and may only be used in this capacity if it meets the criteria set forth for a TREU in Rule 2201, Sections 3.41.1 through 3.41.3. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. This unit shall not be located at this stationary source for more than 180 days in any 12 month period. The time spent at a maintenance or storage facility is not considered time located at the stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The total VOC emissions from the carbon canister system shall not exceed 1.3 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The carbon canister system shall be maintained in proper operating condition at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The carbon canisters removed from the system shall be sealed vapor tight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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

Permit Unit Requirements for S-2010-318-2 (continued)

- 11. 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 upon startup 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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 2201] Federally Enforceable Through Title V Permit
- 15. 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 2201] Federally Enforceable Through Title V Permit
- 16. 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 2201] Federally Enforceable Through Title V Permit
- 17. The maximum throughput of liquid shall not exceed 500 bbl per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The operator shall maintain records of the daily throughput of liquid to this tank calculated on a monthly average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The operator shall maintain records of the specific equipment that this unit replaces, and of the dates and location of its operation. Operator shall maintain a record of each individual period of time and of the total time that this unit is located at this stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2010-319-1

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

950 BARREL WEMCO DEPURATOR MODEL M-213 DISSOLVED AIR FLOATATION OIL/WATER SEPARATOR UNIT CONNECTED TO VAPOR CONTROL SYSTEM S-2010-23

- 1. Vessel shall vent only to vapor control system S-2010-23. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Except as otherwise provided in this permit, this tank shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 3. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. Except as otherwise provided in this permit, 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 5. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. A gas or liquid leak is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate component count for vessel according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Fugitive emissions from the total number of components serving vessel vapor space and vapor piping to vapor recovery system manifold shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
- 8. Only operators who elect to participate in the voluntary vessel preventive inspection and maintenance, and vessel interior cleaning program (program) shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5. When using Tables 3 to 5 and Section 5.7.5 provisions, operators shall perform the procedures as expeditiously as practicable and minimize emissions to the maximum extent practicable. To participate in this program, the operator shall comply with the requirements of Sections 5.7.1 through 5.7.4. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-319-1 (continued)

- 9. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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 4623] Federally Enforceable Through Title V Permit
- 10. Operator shall visually inspect vessel shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the vessel and within five feet of the vessel 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 vessels for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 15. If a component type for a given vessel is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the vessel or vessel 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 4623, Table 3] Federally Enforceable Through Title V Permit
- 16. 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 4623, Table 3] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-319-1 (continued)

- 17. This vessel shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting 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) by displacing 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) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the vessel with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. After a vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held or stored in this vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in vessels complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 24. While performing vessel 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 4623] Federally Enforceable Through Title V Permit
- 25. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof vessel Preventive Inspection and Maintenance Program, and vessel Interior Cleaning Program, and maintain the records of annual vessel inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] 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) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2010-319-1 (continued)

29. Records of all required monitoring data and support information shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rules 1070, 2520 and 4623] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Summary List of Facility Permits

Detailed Facility Report For Facility=2010 and excluding Deleted Permits

		S	orted by	Facility Nam	e and Per	mit Numbe	er
CHEVRON USA IN LIGHT OIL WESTE CA	C RN STATIONARY SOURCE		FAC STA TELE		5 2010 A		TYPE: TitleV EXPIRE ON: 02/28/2021 TOXIC ID: 60275 AREA: 5 / INSP. DATE: 11/22
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2010-4-11	210,000 gallon storage	3020-05 E	1	296.00	296.00	A	5,000 BBL FIXED ROOF WASH TANK WITH VAPOR RECOVERY SYSTEM SERVING TANKS S-2010-4, '10, '11, '266, '267, '291, '292, '293, AND RECEIVING CRUDE OIL FROM FACILITY S-1130, WITH COLLECTED VAPORS PIPED TO GAS PLANT S-49
S-2010-10-5	210,000 gallon storage	3020-05 E	1	296.00	296.00	A	210,000 GAL FIXED ROOF STORAGE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4
S-2010-11-5	210,000 gallon storage	3020-05 E	1	296.00	296.00	A	210,000 GAL FIXED ROOF BALANCE TANK RECEIVING PRODUCED CRUDE OIL FROM S-1130, SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2010-4
S-2010-12-7	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	84,000 GAL FIXED ROOF WASH TANK #1 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2010-15
S-2010-15-7	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	84,000 GAL FIXED ROOF PETROLEUM POWER OIL TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-12
S-2010-23-35	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BARREL FIXED ROOF WASH TANK WITH VAPOR CONTROL (CAHN 3 OIL TREATING PLANT)
S-2010-24-7	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF WASH TANK T-102 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3
S-2010-25-8	336,000 gallon storage	3020-05 E	1	296.00	296.00	А	8,000 BBL FIXED ROOF WASH/REJECT/SHIPPING TANK T-103 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - (CAHN 3)
S-2010-26-6	336,000 gallon storage	3020-05 E	1	296.00	296.00	А	8,000 BBL FIXED ROOF SHIPPING/REJECT TANK T-104 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3
S-2010-142-20	84,000 gallons	3020-05 D	1	223.00	223.00	A	2,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#T-3) CONNECTED TO VAPOR CONTROL SYSTEM CONSISTING OF FOUR VAPOR COMPRESSOR SKIDS, TANK BLANKET GAS SCRUBBER, AND VAPOR PIPING (LOCATED AT 32 U.S. OIL CLEANING PLANT)
S-2010-143-6	84,546 gallon storage	3020-05 D	1	223.00	223.00	А	84,546 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-8 WITH VAPOR CONTROL SYSTEM LISTED UNDER S-2010-142
S-2010-144-4	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-12 WIT VAPOR CONTROL (32 US OIL CLEANING PLANT)
S-2010-146-4	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-2 WITH VAPOR CONTROL (32 US OIL CLEANING PLANT)
S-2010-148-7	16,507 gallon storage	3020-05 B	1	113.00	113.00	A	16,507 GALLON (393 BBL) FIXED ROOF CRUDE OIL DRAIN TANK (#T-7) CONNECTED TO VAPOR CONTROL SYSTEM REFERENCED ON S-2010 142 (LOCATED AT 32 U.S. OIL CLEANING PLANT)
S-2010-198-6	10.5 MMBtu/hr burner	3020-02 G	1	980.00	980.00	А	10.5 MMBTU/HR NATURAL GAS-FIRED TANK HEATING BOILER #401 WITH A POWER FLAME MODEL NVC6-G-30 LOW NOX BURNER

Detailed Facility Report For Facility=2010 and excluding Deleted Permits Sorted by Facility Name and Permit Number

Sorted by Facility Name and Permit Number									
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION		
S-2010-199-6	10.5 MMBtu/hr burner	3020-02 G	1	980.00	980.00	A	10.5 MMBTU/HR NATURAL GAS FIRED TANK HEATING BOILER #B402, WITH A POWER FLAME NOVA PLUS MODEL NVCR6-G-30 LOW NOX BURNER (SERIAL # 120519797)		
S-2010-200-11	30 MMBtu/hr burner	3020-02 H	1	1,238.00	1,238.00	A	30.0 MMBTU/HR STRUTHERS NATURAL GAS, PROPANE, AND BUTANE FIRED PORTABLE STEAM GENERATOR S/N 75/76-37153-2 A WITH NORTH AMERICAN BURNER MODEL 4211-30-LE AND O2 CONTROLLER. PERMITTED AS S-1128-952 IN WESTERN HEAVY OIL STATIONARY SOURCE		
S-2010-201-3	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	2,000 BBL FIXED ROOF PRODUCED WATER TANK T-201 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-203-3	84,000 gallon storage	3020-05 D	1	223.00	223.00	А	2,000 BBL FIXED ROOF PRODUCED WATER TANK T-203 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-204-3	42,000 gallon storage	3020-05 C	1	165.00	165.00	А	1,000 BBL FIXED ROOF DRAIN OVERFLOW TANK T-204 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-205-3	42,000 gallon storage	3020-05 C	1	165.00	165.00	А	1,000 BBL FILTER BACKWASH TANK T-504 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-206-3	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF TANK T-500 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-207-3	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF TANK T-501 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-208-3	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF FILTER WATER TANK T-502 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-209-3	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF WATER TANK T-503 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-210-3	42,000 gallon storage	3020-05 C	1	165.00	165.00	А	1,000 BBL FIXED ROOF FILTER BACKWASH TANK T-505 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-211-3	273,000 gallon storage	3020-05 E	1	296.00	296.00	А	6,500 BBL FIXED ROOF WASTEWATER TANK T-201B VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-212-3	1,218,000 gallon storage	3020-05 G	1	461.00	461.00	А	29,000 BBL FIXED ROOF PRODUCED WATER TANK T-205 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-213-3	403,200 gallon storage	3020-05 E	1	296.00	296.00	А	9,600 BBL FIXED ROOF PRODUCED WATER TANK T-206 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-214-3	71,400 gallon storage	3020-05 D	1	223.00	223.00	А	1,700 BBL FIXED ROOF PRODUCED WATER TANK T-207 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23 - CAHN 3		
S-2010-217-3	210,000 gallon storage	3020-05 E	1	296.00	296.00	А	5000 BBL FIXED-ROOF WASH TANK T-105 VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23		

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION		
S-2010-219-5	45,564 gallon storage	3020-05 C	1	165.00	165.00	A	SAND AND SOLIDS SEPARATION OPERATION WITH TWO 17,682 GALLON BELOW GRADE BASINS , 28' WIDE BY 75' LONG WITH SLOPING BOTTOM FROM 0' TO 4' DEEP AND 3' OVERFLOW WEIR, ONE 10,200 GALLON TRENCH, 8' WIDE BY 57' LONG BY 6' DEEP		
S-2010-220-8	96,600 gallon storage	3020-05 D	1	223.00	223.00	А	2,300 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-208) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23		
S-2010-221-3	21,000 gallon storage	3020-05 C	1	165.00	165.00	А	500 BARREL FIXED ROOF PRODUCED WATER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED IN S-2010-23		
S-2010-223-3	105,000 gallon storage	3020-05 E	1	296.00	296.00	А	2,500 BBL CRUDE OIL WASH TANK (#T-12A)		
S-2010-224-4	84,000 gallons	3020-05 D	1	223.00	223.00	А	2000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-8A WITH VAPOR CONTROL SYSTEM LISTED IN S-2010-142		
S-2010-226-4	96,600 gallon storage	3020-05 D	1	223.00	223.00	A	2,300 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-208A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S- 2010-23		
S-2010-227-4	42,000 gallon storage	3020-05 C	1	165.00	165.00	A	1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209A) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S- 2010-23		
S-2010-228-4	42,000 gallon storage	3020-05 C	1	165.00	165.00	A	1,000 BBL FIXED-ROOF PETROLEUM STORAGE TANK (T-209-B) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S- 2010-23		
S-2010-229-4	42,000 gallon storage	3020-05 C	1	165.00	165.00	A	1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK (T-210) CONNECTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S- 2010-23		
S-2010-245-4	336,000 GALLONS	3020-05 E	1	296.00	296.00	A	8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-106) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)		
S-2010-250-4	336,000 GALLONS	3020-05 E	1	296.00	296.00	A	8,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-107) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)		
S-2010-264-4	756,000 GALLONS	3020-05 F	1	362.00	362.00	A	18,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK (T-211) VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL CLEANING PLANT)		
S-2010-266-4	4,200 gallons	3020-05 A	1	91.00	91.00	А	100 BBL FIXED ROOF DRAIN TANK (T-4) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4		
S-2010-267-4	420,000 gallons	3020-05 E	1	296.00	296.00	А	5,000 BBL FIXED ROOF SLOP OIL TANK (T-5) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON S-2010-4		
S-2010-268-3	3,822 gallon storage	3020-05 A	1	91.00	91.00	А	91 BBL CRUDE OIL VESSEL WITH PRV (8Z NEMU)		

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION		
S-2010-288-5	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 NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS		
S-2010-291-2	130,200 gallons	3020-05 E	1	296.00	296.00	A	3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700A) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4		
S-2010-292-2	130,200 gallons	3020-05 E	1	296.00	296.00	А	3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-700B) SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4		
S-2010-293-2	130,200 gallons	3020-05 E	1	296.00	296.00	A	3,100 BBL FIXED ROOF PRODUCED WATER TANK (T-710) RECEIVING FLUID FROM TWO UNVENTED LIQUID FILTER VESSELS AND SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2010-4		
S-2010-294-3	19,404 gallons	3020-05 B	1	113.00	113.00	A	UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)		
S-2010-295-3	19,404 gallons	3020-05 B	1	113.00	113.00	A	UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)		
S-2010-296-3	19,404 gallons	3020-05 B	1	113.00	113.00	A	UP TO 462 BBL FIXED ROOF CRUDE OIL DRAIN TANK WITH PV VALVE AUTHORIZED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE (CAN BE OWNED BY PERMITTEE OR RENTED ON AN AS-NEEDED BASIS)		
S-2010-297-2	42,000 gallons	3020-05 C	1	165.00	165.00	A	1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-301 WITH VAPOR CONTROL SYSTEM LISTED 0N S-2010-142		
S-2010-308-2	130 wells	3020-09 B	130	11.23	1,459.90	A	TEOR SYSTEM WITH UP TO 130 STEAM ENHANCED WELLS OPERATED WITH CLOSED CASING VENTS, PERMIT EXEMPT WELL TESTERS, PRESSURE VESSELS, RELIEF TANK, AND MASTER TRAP(S) VENTED TO H2S REMOVAL SYSTEM AND THE FIELD GAS GATHERING PIPELINE		
S-2010-309-1	119,680 gallons	3020-05 E	1	296.00	296.00	А	1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN		
S-2010-310-1	119,680 gallons	3020-05 E	1	296.00	296.00	А	1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN		
S-2010-311-1	119,680 gallons	3020-05 E	1	296.00	296.00	A	1,600 SQ FT SURFACE AREA (MAXIMUM) VACUUM TRUCK UNLOADING BASIN		

Detailed Facility Report For Facility=2010 and excluding Deleted Permits

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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-2010-312-2	363 hp	3020-10 C	1	290.00	290.00	A	DEWATERING AND OIL RECOVERY OPERATION WITH DRY MATERIAL HOPPER ME-722 SERVED BY DUST COLLECTOR, 1000 GALLON POLYMER TANK T-721, MACERATOR, SOLIDS CONVEYOR(S), 1000 BBL SLURRY MIXING TANK T-711, CENTRISYS CA21-4 HC THREE PHASE CENTRIFUGE (OR EQUIVALENT), SOLIDS DISCHARGE CONVEYOR AND TEMPORARY SOLIDS STORAGE PAD (CAHN 3 OIL TREATING PLANT)		
S-2010-313-2	42,000 gallons	3020-05 C	1	165.00	165.00	A	1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK T-714 WITH COMPRESSORS K-731A AND K-731B DISCHARGING TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)		
S-2010-314-2	42,000 gallons	3020-05 C	1	165.00	165.00	A	1000 BBL FIXED ROOF CRUDE OIL/WATER STORAGE TANK T-715 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-2010-23 (CAHN 3 OIL TREATING PLANT)		
S-2010-315-3	4200 gallons	3020-05 A	1	91.00	91.00	А	100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10		
S-2010-317-3	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-1128-1004) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S LIGHT OIL WESTERN STATIONARY SOURCE:		
S-2010-318-2	21000 Gallons	3020-05 C	1	165.00	165.00	A	500 BBL TRANSPORTABLE FIXED ROOF CRUDE OIL PRODUCED FLUIDS STORAGE TANK DISCHARGING TO A TRANSPORTABLE VAPOR CONTROL SYSTEM CONSISTING OF CAUSTIC SCRUBBER AND A SET OF TWO 200 LB CARBON CANISTER SYSTEM IN SERIES SERVING AS A TEMPORARY REPLACEMENT EMISSIONS UNIT (TREU) FOR PERMIT UNITS S-2010-313 OR S-2010-314		
S-2010-319-1	39,900 gallons	3020-05 C	1	165.00	165.00	A	950 BARREL WEMCO DEPURATOR MODEL M-213 DISSOLVED AIR FLOATATION OIL/WATER SEPARATOR UNIT CONNECTED TO VAPOR CONTROL SYSTEM S-2010-23		

Number of Facilities Reported: 1