



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

MAY 22 2014

Mr. Greg Pritchett
Chevron USA Inc
PO Box 1392
Bakersfield, CA 93302



**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1128 and S-2010
Project # 1141623 (S-2010) and 1141067 (S-1128)**

Dear Mr. Pritchett:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes a 25 MMBtu/hr limited-use, air-assisted produced gas flare to be operated at multiple unspecified locations within sources S-1128 and S-2010 and with emissions increases of 4,080 lb/yr NOx and 3,780 lb/yr VOC.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:RE/st

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Flare and VRS Modification

Facility Name: Chevron U.S.A., Inc. Date: May 13, 2014
Mailing Address: P.O. Box 1392 Engineer: Richard Edgehill
Bakersfield, CA 93302 Lead Engineer: Allan Phillips
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E-Mail: AshleyDahlstrom@chevron.com
Application #(s): S-2010-3-12, '-317-0 and S-1128-617-23, '-981-2, and '-1004-0
Project #: S-2010, 1141623 and S-1128, 1141607
Deemed Complete: April 14, 2014

I. Proposal

Chevron U.S.A., Inc. (CUSA) is requesting an Authority to Construct permit to authorize a 600 mscf/day flare to serve as a disposal device for tank and TEOR vapor control systems at various unspecified locations in stationary sources S-1128 and S-2010. The flare will be permitted in both facilities S-1128 and S-2010. Existing vapor recovery systems S-1128-617, '-981, and S-2010-3 will be modified to authorize the flare as an additional disposal device.

Note that FYI 111 (NSR Applicability Determination) Category 20 stated below implies that the project is not a NSR modification of S-1128-617, '-981, and S-2010-3 as stated in the table below. Therefore Rule 2201 is not applicable to the proposed changes to these permit units.

FYI-111 (NSR Applicability Determination)

	ATC req'd ?	TV application req'd ?	NSR mod ?	Description	Comments
20	Yes	Yes	No	Allowing a vapor control system to vent to a different permitted disposal device	Not a change in the method of operation of the vapor control system <u>provided that the vapor control system can continue to meet its control efficiency requirement.</u>

The project results in an increase in emissions triggering a Federal Major Modification. However, BACT is not required as the flare serves as a vapor control device (not an emissions unit). Offsets and public notice are required.

Disposition of Outstanding ATCs

ATCs S-1128-617-22 and '981-1 will not be implemented before the proposed ATCs. Current PTOs S-1128-617-21, '981-0, and S-2010-3-11 are included in **Attachment I**.

Aera facilities S-1128 and S-2010 operate under Title V Permits. The project is a Federal Major Modification and, therefore, it is classified as a Title V Significant Modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. VPC must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 4001	New Source Performance Standards (4/14/99) Subpart Kb (Amended 4/14/99) - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) - not applicable – tanks are not being modified (no increase in emissions)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4311	Flares (6/18/09)
Rule 4401	Steam-Enhanced Crude Oil Production Wells (6/16/11)
Rule 4623	Storage of Organic Liquids (5/19/05)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)	
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines	

III. Project Location

The flare will be authorized at various unspecified locations within CUSA's Heavy Oil Western and Light Oil Western Stationary Sources (S-1128 and S-2010). The equipment will be precluded from operating within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

A location drawing is included in **Attachment II**.

IV. Process Description

The flare will be used as a vapor control device for oilfield equipment. Tank vapor control systems S-2010-3, S-1128-617, and S-1128-981 will list the proposed flare (S-2010-317 and S-1128-1004) as an alternative disposal device.

V. Equipment Listing

Pre-Project Equipment Description:

- PTO S-1128-617-21: 3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618,-620,-621,-622,-623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND '18 VIA 31E BOOSTER STATION OR TEOR VAPOR COLLECTION SYSTEM S-1128-125 (31EOCP)
- PTO S-1128-981-0: TEOR OPERATION WITH UP TO 100 WELLS INCLUDING OPEN OR CLOSED CASING VENTS WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS AND COMPRESSORS, WITH THE VAPORS PIPED TO THE 31E BOOSTER COMPRESSOR FACILITY OF THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617
- PTO S-2010-3-11: 5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK "T-2" WITH VAPOR CONTROL SYSTEM SHARED WITH S-2010-8 AND '9 DISCHARGED TO THE GAS SALES PIPELINE AND/OR THE 31E BOOSTER STATION (29D OIL CLEANING PLANT)

Proposed Modification:

- S-1128-617-23: MODIFICATION OF 3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618,-620,-621,-622,-623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND '18 VIA 31E BOOSTER STATION OR TEOR VAPOR COLLECTION SYSTEM S-1128-125 (31EOCP): AUTHORIZE USE OF FLARE (PERMIT S-1128-1004) AS CONTROL DEVICE
- S-1128-981-2: MODIFICATION OF TEOR OPERATION WITH UP TO 100 WELLS INCLUDING OPEN OR CLOSED CASING VENTS WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS AND COMPRESSORS, WITH THE VAPORS PIPED TO THE 31E BOOSTER COMPRESSOR FACILITY OF THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617: AUTHORIZE USE OF FLARE S-1128-1004 AS CONTROL DEVICE

S-2010-3-12: MODIFICATION OF 5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK "T-2" WITH VAPOR CONTROL SYSTEM SHARED WITH S-2010-8 AND '9 DISCHARGED TO THE GAS SALES PIPELINE AND/OR THE 31E BOOSTER STATION (29D OIL CLEANING PLANT): AUTHORIZE USE OF FLARE S-2010-317 AS CONTROL DEVICE

Post-Project Equipment Description:

S-1128-617-23: MODIFICATION OF 3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618, -620, -622, -623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND/OR '18 VIA 31E BOOSTER STATION 2F GAS LINE (31E OCP) AND/OR FLARE S-1128-1004

S-1128-981-2: MODIFICATION OF TEOR OPERATION WITH UP TO 100 WELLS, INCLUDING OPEN OR CLOSED CASING VENTS, WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS, COMPRESSORS, WITH THE VAPORS PIPED TO THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617 AND/OR FLARE S-1128-1004

S-1128-1004-0: 25 MMBTU/HR LIMITED USE, TRANSPORTABLE, AIR-ASSISTED FLARE SERVING TANK AND TEOR VAPOR CONTROL SYSTEMS (ALSO PERMITTED AS S-2010-317) - VARIOUS UNSPECIFIED LOCATIONS CHEVRON USA INC'S HEAVY OIL WESTERN STATIONARY SOURCE

S-2010-3-12: 5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK "T-2" WITH VAPOR CONTROL SYSTEM SHARED WITH S-2010-8 AND '9 DISCHARGED TO THE GAS SALES PIPELINE, AND/OR THE 31E BOOSTER STATION, AND/OR FLARE S-1210-317 (29D OIL CLEANING PLANT)

S-2010-317-0: 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

VI. Emission Control Technology Evaluation

The flare will be required by permit condition to operate in a safe manner and without creating a nuisance. Air-assist promotes complete combustion of gases with smokeless operation (visible emissions limited to 5% opacity).

VII. General Calculations

A. Assumptions

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year. NSR calculations are not required for permit units S-2010-3, S-1128-617 and '981 as they are not being modified.

Flare S-2010-317 and S-1128-1004:

- The potential operation of the flare is 24 hours per day and 2400 hours per year.
- Average produced gas heating value ~ 1,000 Btu/scf
- Maximum flare capacity 600 MMBtu/day = 25 MMBtu/hr
- Flare emissions are based on 600 Mscf of waste gas flared per day and 60 billion Btu/year (annual operation, 2400 hrs/yr)
- Proposed flow rates for the flare results in pilot emissions less than 2 lbs/day. Therefore, pursuant to FYI 310 "Significance and Accounting of Flare Pilot Flame Emissions" 10/24/12, pilot emissions are insignificant (< 2 lbs/day of all air contaminants) and the flare pilot is a Rule 2020 "Low Emitting Unit" exempt from all Rule 2201 permitting requirements.

B. Emission Factors

Flare:

Natural Gas:

Pre and Post-Project Emission Factors			
	lb/MMBtu	lb/MMscf	Source
NO _x	0.068	68.0	FYI 104, EPA AP-42
*SO _x	0.143	142.9	Mass Balance Equation Below
PM ₁₀	0.008	8.0	FYI 104, EPA AP-42
CO	0.370	370.0	FYI 104, EPA AP-42
VOC	0.063	63.0	FYI 104, EPA AP-42

*Based upon natural gas HHV of 1,000 Btu/scf and a total sulfur content of 25.0 gr/100 scf of gas (District Policy APR 1720)

$$SO_x = (50 \text{ gr-S}/100 \text{ scf})(10^6 \text{ scf fuel/MMSCF})(\text{lb}/7000 \text{ gr})(\text{MMSCF}/1,000 \text{ MMBtu})(64 \text{ lb-SO}_2/32 \text{ lb-S})$$

$$= 0.143 \text{ lb/MMBtu}$$

GHG Emissions Calculations:

Basis and Assumptions:

- Capacity is 25 MMBtu/hr.
- The equipment is authorized to operate up to 6000 MMBtu/yr/[60 MMBtu/day x 24 hr/day] = 2,400 hrs/yr.

- Emission factors and global warming potentials (GWP) are taken from the California Climate Change Action Registry (CCAR), Version 3.1, January, 2009 (Appendix C, Tables C.7 and C.8):

CO₂ 53.06 kg/MMBtu (HHV) natural gas (116.7lb/MMBtu)
CH₄ 0.005 kg/MMBtu (HHV) natural gas (0.011 lb/MMBtu)
N₂O 0.0001 kg/MMBtu (HHV) natural gas (0.00022 lb/MMBtu)

GWP for CH₄ = 21 lb-CO₂e per lb-CH₄
GWP for N₂O = 310 lb-CO₂e per lb-N₂O

B. Calculations

1. Pre-Project Potential to Emit (PE1)

Flare:

The flare is a new permit unit. Therefore, PE1= 0 for all pollutants.

2. Post Project Potential to Emit (PE2)

Daily Waste Gas Combustion Emissions:

NO_x: (0.068 lb/MMBtu)(600 MMBtu/day) = 40.8 lb/day
SO_x: (0.143 lb/MMBtu)(600 MMBtu/day) = 85.8 lb/day
PM₁₀: (0.008 lb/MMBtu)(600 MMBtu/day) = 4.8 lb/day
CO: (0.370 lb/MMBtu)(600 MMBtu/day) = 222.0 lb/day
VOC: (0.063 lb/MMBtu)(600 MMBtu/day) = 37.8 lb/day

Annual Waste Gas Combustion Emissions:

NO_x: (0.068 lb/MMBtu)(60,000 MMBtu/yr) = 4,080 lb/yr
SO_x: (0.143 lb/MMBtu)(60,000 MMBtu/yr) = 8,580 lb/yr
PM₁₀: (0.008 lb/MMBtu)(60,000 MMBtu/yr) = 480 lb/yr
CO: (0.370 lb/MMBtu)(60,000 MMBtu) = 22,200 lb/yr
VOC: (0.063 lb/MMBtu)(60,000 MMBtu/yr) = 3,780 lb/yr

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	40.8	4,080
SO _x	85.8	8,580
PM ₁₀	4.8	480
CO	222	22,200
VOC	37.8	3,780

Emissions profiles are included in **Attachment III**.

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

Facility emissions for both S-1128 and S-2010 are already above the Offset and Major Source Thresholds for VOC emissions; therefore, SSPE1 calculations are not necessary.

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

Since facility emissions for both S-1128 and S-2010 are already above the Offset and Major Source Thresholds for VOC emissions, SSPE2 calculations are not necessary.

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Source S-1128 and S-2010 are existing Major Sources and will remain Major Sources for all pollutants. S-2010 is an existing Major Source for NO_x, CO, and VOC (project 1124301) and is not becoming a Major Source for SO_x or PM₁₀ with this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase							>100,000*
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)							Y

*both facilities S-1128 and S-2010 are Major PSD sources as indicated below

CUSA recently renewed ATCs for 10 x 85 MMBtu/hr and one 62.5 MMBtu/hr steam generators (S-2010-274-0 through '-283-0, '-284)

CUSA S-1128 has several 62.5 MMBtu/hr steam generators

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Flare:

As the flare is a new unit, BE=PE1=0 for all pollutants.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

PE2 for the flare is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant*	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	4,080	50,000	No
SO _x	8,580	80,000	No
PM ₁₀	480	30,000	No
VOC	3780	50,000	No

*S-2010 is a Major Source for only NO_x and VOC

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

The project's combined total emission increases are calculated above and compared to the Federal Major Modification Thresholds in the following table:

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO _x *	4,080	0	Yes
VOC*	3,780	0	Yes
PM ₁₀	480	30,000	No
PM _{2.5}	480	20,000	No
SO _x	8,580	80,000	No

As demonstrated above, this project constitutes a Federal Major Modification for both NO_x and VOCs for both facilities S-1128 and S-2010 but is not a Federal Major Modification for PM₁₀, PM_{2.5}, and SO_x, and no further analysis is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO

- PM
- PM10
- Greenhouse gases (GHG): CO₂, N₂O, CH₄, HFCs, PFCs, and SF₆

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

I. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)							
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀	CO ₂ e
Total PE from New and Modified Units	~2	< 2	4.3	0	< 0.5	< 0.5	3,510*
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	N	N	N	N	N	N	N

*GHG Emissions Calculations:

CO₂ Emissions = 25 MMBtu/hr x 116.7 lb/MMBtu
= 2,917.5 lb-CO₂e/hour

CH₄ Emissions = 25 MMBtu/hr x 0.011 lb/MMBtu x 21 lb-CO₂e per lb-CH₄
= 5.8 lb-CO₂e/hour

N₂O Emissions = 25 MMBtu/hr x 0.00022 lb/MMBtu x 310 lb-CO₂e per lb-N₂O
= 1.7 lb-CO₂e/hour

Total Emissions = 2,917.5 + 5.8 + 1.7 = 2,925 lb-CO₂e/hour

Annual Emissions
2,925 lb-CO₂e/hour x 2,400 hr/year ÷ 2,000 lb/ton = 3,510 tons-CO₂e/year

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. As the flare is new, QNEC is equal to PE2/4.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

The flare is not an emissions unit but will serve as a vapor control device. It is therefore not subject to BACT.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and be required if the SSPE2 equals to or exceeds the offset threshold levels in Rule 2201 Table 4-1.

Applicant concedes their SSPE2 is over the VOC threshold of 20,000 lb/year.

2. Quantity of Offsets Required

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets required (lb/year) = $(\Sigma[PE2 - BE] + ICCE) \times DOR$, for all new or modified emissions units in the project,

Where,

PE2 = Post Project Potential to Emit, (lb/year)

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

Otherwise,

BE = Historic Actual Emissions (HAE)

Baseline Emissions (BE) for the flare are equal to zero as the flare is a new permit unit, BE = 0.

Also, there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Offsets required (lb/year) = $([PE2 - BE] + ICCE) \times DOR$

ICCE = 0 lb/year

Offsets required (lb/year) = $(PE2 - 0) \times DOR$

Section 4.6.1 of Rule 2201 states that emissions offsets are not required for increases in carbon monoxide attainment areas provided the applicant demonstrates to the satisfaction of the APCO that the Ambient Air Quality (AAQ) standards are not violated.

NOx:

Offsets required (lbs/year) = $PE2 \times 1.5$
 $= 4,080 \times 1.5$
 $= 6,120 \text{ lbs}$

Calculating the appropriate quarterly emissions to be offset for each unit is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1,530	1,530	1,530	1,530

The applicant has stated that the facility plans to use ERC certificate S-4195-2 to offset the increases in NO_x emissions associated with this project. The above amounts have been reserved for the project.

SO_x:

$$\begin{aligned}\text{Offsets required (lbs/year)} &= \text{PE2} \times 1.5 \\ &= 8,580 \times 1.5 \\ &= 12,870 \text{ lbs}\end{aligned}$$

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
3,218	3,218	3,218	3,218

The applicant has stated that the facility plans to use ERC certificate S-2080-5 to offset the increases in SO_x emissions associated with this project. The above amounts have been reserved for the project.

PM₁₀:

$$\begin{aligned}\text{Offsets required (lbs/year)} &= \text{PE2} \times 1.5 \\ &= 480 \times 1.5 \\ &= 720 \text{ lbs}\end{aligned}$$

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
180	180	180	180

The applicant has stated that the facility plans to use ERC certificate S-2035-4 to offset the increases in PM₁₀ emissions associated with this project. The above amounts have been reserved for the project.

VOC:

$$\begin{aligned}\text{Offsets required (lbs/year)} &= \text{PE2} \times 1.5 \\ &= 3,780 \times 1.5 \\ &= 5,670 \text{ lbs}\end{aligned}$$

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1,418	1,418	1,418	1,418

The applicant has stated that the facility plans to use ERC certificate S-3365-1 to offset the increases in VOC emissions associated with this project. The above amounts have been reserved for the project.

CO:

Notwithstanding the above, Section 4.6.1 of Rule 2201 states that emissions offsets are not required for increases in carbon monoxide in attainment areas provided the applicant demonstrates to the satisfaction of the APCO that the Ambient Air Quality Standards are not violated in the areas to be affected, and such emissions will be consistent with Reasonable Further Progress, and will not cause or contribute to a violation of Ambient Air Quality Standards. The District performed an Ambient Air Quality Analysis based on emissions from Netting Option #1 which is worst case (discussed later) and determined that this project will not result in or contribute to a violation of an Ambient Air Quality Standard for CO (see **Attachment VI**). Therefore, CO offsets are not required for this project.

Note that, even though the flare will be permitted in both facilities S-1128 and S-2010, tank emissions only need to be fully offset once.* Therefore, the offsets requirement (condition) will be included only on ATC S-1128-1004-0.

*Rule 2201 Section 4.6.7 provides an offset exemption for relocation of equipment from one stationary source to another if offsets that otherwise would be provided were previously provided.

Proposed Rule 2201 (offset) Conditions:

Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: NO_x 1,530 lb/qtr, SO_x 3218 lb/qtr, PM₁₀ 180 lb/qtr, and VOCs 1,418 lb/qtr. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

ERC Certificate Numbers S-4195-2, S-2080-5, S-2035-4, and S-3365-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project is a Federal Major Modification. Therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

The PE2 for this new unit is compared to the daily PE Public Notice thresholds in the following table:

PE > 100 lb/day Public Notice Thresholds			
Pollutant	PE2 (lb/day)	Public Notice Threshold	Public Notice Triggered?
NO _x	40.8	100 lb/day	No
SO _x	1.71	100 lb/day	No
PM ₁₀	4.8	100 lb/day	No
CO	222	100 lb/day	Yes
VOC	37.8	100 lb/day	No

Therefore, public noticing for PE > 100 lb/day purposes is required.

c. Offset Threshold

S-2010 and S-1128

Offset Thresholds				
Pollutant	SSPE1* (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	>20,000 lb/year		20,000 lb/year	No
SO _x	>54,750 lb/year		54,750 lb/year	No
PM ₁₀	>29,200 lb/year		29,200 lb/year	No
CO	>200,000 lb/year		200,000 lb/year	No
VOC	>20,000 lb/year		20,000 lb/year	No

*SSPE2 for project 1124301

As detailed above, the SSPE1 exceeds the offset thresholds for NO_x, SO_x, PM₁₀, CO, and VOC; therefore this project does not increase any pollutant from a level below the offset threshold to a level exceeding the emissions offset threshold

d. SSiPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSiPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSiPE = SSPE2 – SSPE1. The SSiPE is compared to the SSiPE Public Notice thresholds in the following table.

SSiPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSiPE (lb/year)	SSiPE Public Notice Threshold	Public Notice Required?
NO _x			4,080	20,000 lb/year	No
SO _x			171	20,000 lb/year	No
PM ₁₀			480	20,000 lb/year	No
CO			22,200	20,000 lb/year	Yes
VOC			3,780	20,000 lb/year	No

As demonstrated above, the SSiPE for CO is greater than 20,000 lb/year; therefore public noticing for SSiPE purposes is required.

2. Public Notice Action

As discussed above, public noticing is required for this project for CO emissions in excess of 100 lb/day, an SSiPE of CO emissions > 20,000 lbs/year and Federal Major Modification purposes. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

Flare:

Daily flared gas heat input, except pilot fuel, shall not exceed 600 MMBtu per day. [District Rule 2201] Y

Annual flared gas heat input, except pilot fuel, shall not exceed 60 billion Btu per year. [District Rule 2201] Y

Flared gas sulfur content shall not exceed 50.0 gr S/100 scf (800 ppmv H₂S). [District Rule 2201] Y

Emission rates shall not exceed any of the following: 0.008 lb-PM₁₀/MMBtu, 0.068 lb-NO_x/MMBtu (as NO₂), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Y

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

The following monitoring condition is required to demonstrate compliance with Rule 2201.

Permittee shall inspect the flare in operation for visible emissions at each new location and not less frequently than once every two weeks. 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] Y

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition is listed on the ATC:

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] Y

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. **Attachment IV.** The results from the Criteria Pollutant Modeling are presented below.

Criteria Pollutant Modeling Results*

Values are in $\mu\text{g}/\text{m}^3$

Steam Generator	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass	X	X	X	Pass
SO _x	Pass ²	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ³	Pass ³
PM2.5	X	X	X	Pass ³	Pass ³

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures. The criteria pollutant 1-hour value passed using TIER I NO₂ NAAQS modeling

²The project was compared to the 1-hour SO₂ National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

G. Compliance Certification

The compliance certification is required for any project, which constitutes a New Major Source or a Federal.

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this project does constitute a Federal Major Modification, therefore this requirement is applicable. Included in **Attachment V** is the Compliance Certification Statement.

H. Alternate Siting Analysis

The current project occurs at an existing facility. Since the flare will be used at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2410 Prevention of Significant Deterioration

As demonstrated above this project will not result in a significant increase in emissions; therefore, Rule 2410 does not apply.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

The project is Federal Major Modification and therefore is also a Title V Significant Modification. As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Included in **Attachment V** are CUSA's Title V Compliance Certification forms for facilities S-1128 and S-2010. Continued compliance with this rule is expected.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to flare operations.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

The flare is equipped with air assist and is expected to continue to operate without visible emissions as dark as, or darker than, Ringelmann 1/4 or 5% opacity as stated in the following ATC condition:

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 2010] Y

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (**Attachment IV**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-1128-1004 and S-2010-317	0 per million	No

The following special conditions are required and included (slightly revised) on the ATCs:

Flare usage shall not exceed 60,000,000 scf/yr (60 billion Btu/yr).

The flare must be at least 1,000 feet from the nearest receptor (business or residence).

Rule 4311 Flares

Rule 4311 limits the emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_x), and sulfur from the operation of flares.

Section 5.1 states flares permitted to operate only during an emergency are not subject to the requirements of Section 5.6 and 5.7.

This flare does not qualify as an emergency flare; therefore this section is not applicable.

Section 5.2 requires that a flame be present at all times when combustible gases are vented through the flare. The flare will be equipped with a continuous pilot and a device that sends an electrical charge to the spark plug every 10, 15, or 30 seconds. This spark signal allows the propane pilot to be relit if it were to be blown out by passing wind. The following condition satisfies this requirement:

- *Flare shall be equipped with automatic re-ignition provisions. [District Rule 4311]*

Section 5.3 The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. The flare will be equipped with a continuous pilot and a device that sends an electrical charge to the spark plug every 10, 15, or 30 seconds. This spark signal allows the propane pilot to be relit if it were to be blown out by passing wind. The following condition is included on the ATC:

16. The flame shall be present at all times when combustible gases are vented through the flare. [District Rules 2201 and 4311] Y

Section 5.4 Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. The flare will be equipped with a continuous pilot and a device that sends an electrical charge to the spark plug every 10, 15, or 30 seconds. This spark signal allows the propane pilot to be relit if it were to be blown out by passing wind.

Section 5.5 Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. This flare does not utilize a flow-sensing automatic ignition system.

Section 5.6 Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. The requirements of this section shall not apply to Coanda effect flares.

The flare gas pressure is greater than 5 psig; therefore, this section is not applicable.

Section 5.7 This section applies to ground-level enclosed flares. As this flare is an open flare, Section 5.7 does not apply.

Section 5.8 states that flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. Subsection 6.5.1 requires the operator of a petroleum refinery flare or any flare that has a flaring capacity of greater or equal to 5.0 MMBtu per hour to submit a flare minimization plan (FMP).

A flare minimization plan was submitted for the flare.

Section 5.9 addresses Petroleum Refinery SO₂ Performance Targets. As this flare will not be operated at a petroleum refinery, this section is not applicable.

Section 5.10 requires the operator of a flare subject to flare minimization requirements pursuant to Section 5.8 to monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The following condition will be included on the ATC:

Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 4311]

Section 5.11 requires the operator of a petroleum refinery or a flare with a flaring capacity equal to or greater than 50 MMBtu/hr to monitor the flare pursuant to Sections 6.6, 6.7, 6.8, 6.9, and 6.10. This flare will not be utilized at a petroleum refinery and does not have a flaring capacity equal to or greater than 50 MMBtu/hr. Therefore, this section is not applicable.

6.0 Administrative Requirements:

Section 6.1 requires the following records to be retained on-site for a minimum of five years:

- Copy of the compliance determination conducted pursuant to Section 6.4.1
- Copy of the source testing result conducted pursuant to Section 6.4.2
- For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation
- Operators claiming an exemption pursuant to Section 4.3 shall record annual throughput, material usage, or other information necessary to demonstrate an exemption under that section
- Effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5
- Effective on and after July 1, 2011, where applicable, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10

The following condition will ensure compliance with this section:

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] Y

Section 6.2.1 requires the operator of a flare subject to the flare minimization plan to notify the District of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time.

Section 6.2.2 effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 must submit an annual report that summarizes all Reportable Flaring Events.

Section 6.2.3 effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period.

Section 6.3 lists test methods an operator can use to demonstrate compliance with this rule. Compliance with this section is expected.

Section 6.4 requires records of compliance with 5.6 to be provided to the District upon request and lists further requirements for enclosed flares. This flare is not subject to the requirements of Section 5.6; therefore, Section 6.4 does not apply.

Section 6.5 requires operators of flares >5.0 MMBtu/hr to submit a flare minimization plan (FMP) by July 1, 2010.

CUSA has submitted a flare minimization plan (FMP) with this application.

Section 6.6 requires the operator of a refinery flare or any flare greater than 50 MMBtu/hr to monitor vent gas composition.

The flare is not operated at a refinery and is less than 50 MMBtu/hr. Therefore, this section does not apply.

Section 6.7 requires the operator of a refinery flare or any flare greater than 50 MMBtu/hr to monitor the volumetric flows of purge and pilot gases with flow measuring devices.

The flare is not operated at a refinery and is less than 50 MMBtu/hr. Therefore, this section does not apply.

Section 6.8 requires operators of flares with water seals to monitor water level and pressure. This flare is not equipped with a water seal; therefore this section is not applicable.

Section 6.9 requires the operator of a refinery flare or any flare greater than 50 MMBtu/hr to comply with general monitoring conditions.

The flare is not operated at a refinery and is less than 50 MMBtu/hr. Therefore, this section does not apply.

Section 6.10 applies to operators of petroleum refinery flares. This stationary source does not refine petroleum products; therefore this section is not applicable.

Compliance is expected.

Rule 4401 Steam-Enhanced Crude Oil Production Wells

The purpose of this rule is to limit the Volatile Organic Compound (VOC) emissions from steam-enhanced crude oil production wells.

The TEOR in this project is in full compliance with Rule 4401. This project proposal will not affect any of the 4401 conditions on the tank permits.

Rule 4623 Storage of Organic Liquids

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

Tank S-1128-617 and S-2010-3 in this project are in full compliance with Rule 4623 and the project is not expected to affect compliance status.

Continued compliance is expected.

Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

The maximum sulfur content of flared gas is limited to 1.0 gr S/100 scf. Compliance is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs S-2010-3-12, '-317-0 and S-1128-617-23, '-981-2, and '-1004-0 subject to the permit conditions on the attached draft ATCs in **Attachment VIII**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1128-617-23	3020-05-E	126,000 gal	\$210
S-1128-981-2	3020-09	100 wells * \$8/well =	\$800
S-1128-1004-0	3020-02-H	25 MMBtu/hr	\$1030.00
S-2010-317-0	3020-02-H	25 MMBtu/hr	\$1030.00
S-2010-3-12	3020-05-E	210,000 gal	\$246

Attachments

- I. PTOs S-1128-617-21, '981-0, and S-2010-3-11
- II. Project Location Map
- III. Emissions Profiles
- IV. HRA and AAQA Modelling
- V. Statewide Compliance Statement, Title V Compliance Certification form
- VI. Draft ATCs

ATTACHMENT I
PTOs S-1128-617-21, '981-0, and S-2010-3-11

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2010-3-11

EXPIRATION DATE: 02/29/2016

SECTION: 29 TOWNSHIP: 32S RANGE: 24E

EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK "T-2" WITH VAPOR CONTROL SYSTEM SHARED WITH S-2010-8 AND '9 DISCHARGED TO THE GAS SALES PIPELINE AND/OR THE 31E BOOSTER STATION (29D OIL CLEANING PLANT)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank. The vapor recovery system shall be APCO-approved, maintained in a leak-free condition, and capable of reducing VOC emissions by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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 NSR Rule and 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. The permittee shall maintain records of number and type of components installed. Permittee shall update such records when new components are installed. Compliance with permitted VOC emissions shall be calculated from the permittee's records of the number and type of components installed. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from component leaks shall be calculated using the EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations Average Emission Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall not exceed 36.5 lb/day and 13,323 lb/yr. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, this tank shall be maintained in a leak-free condition. [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. 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. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during four consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. 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
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. [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 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
16. 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
17. 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, 9.4.1] Federally Enforceable Through Title V Permit
18. 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
19. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [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.

21. The 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
22. 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 explosive limit (LEL), whichever is less; or (2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or (3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7] 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, 5.7] 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, 5.7] 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, refilling the tank with an organic liquid, and maintenance operations. [District Rule 4623, 5.7] 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 is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
27. While performing tank cleaning activities, operators may only use the following cleaning agents: water, hot water, 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. The tank sediment may be used as road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 4623, 5.7] 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, 5.7] Federally Enforceable Through Title V Permit
29. During sludge removal from tanks containing organic liquids 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, 5.7] Federally Enforceable Through Title V Permit
30. The permittee shall only transport removed sludge from tanks containing organic liquids with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
31. The permittee shall store removed sludge from tanks containing organic liquids 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. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. The permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
33. The operator shall maintain records of required monitoring data and support information for inspection at any time for a period of five years. The records shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-981-0

EXPIRATION DATE: 02/29/2016

SECTION: 1 TOWNSHIP: 11N RANGE: 24W

EQUIPMENT DESCRIPTION:

TEOR OPERATION WITH UP TO 100 WELLS INCLUDING OPEN OR CLOSED CASING VENTS WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS AND COMPRESSORS, WITH THE VAPORS PIPED TO THE 31E BOOSTER COMPRESSOR FACILITY OF THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617

PERMIT UNIT REQUIREMENTS

1. The Permittee shall maintain with the permit accurate fugitive component counts for components in gas/vapor service, and the resulting emissions calculations using the emissions factors in Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IX-2c, Oil and Gas Production Screening Value Ranges Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC content of the non-condensable casing vapors shall not exceed 81% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain with the permit a current roster of all the wells included in this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive emissions from the TEOR system components shall not exceed 54.5 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall test the TEOR gas annually for VOC content at the header upstream of the 31E Oil Cleaning Plant. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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 requirements of District Rule 4401. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. Fluids produced from steam-enhanced wells with closed well casing vents shall be introduced only to front line production equipment vented to a District-approved vapor collection and control system as defined in Section 3.50 of Rule 4401, or to gauge tanks as defined in Section 3.17 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. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
8. For wells with the casing vents open, the well vent shall be connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
9. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.6.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. There shall be no components with a major liquid leak as defined in Section 3.20.2 of Rule 4401. [District Rule 4401, 5.6.2.2] Federally Enforceable Through Title V Permit
11. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.6.2.3] Federally Enforceable Through Title V Permit
12. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401, 5.6.2.4] Federally Enforceable Through Title V Permit
13. No leaking components (as defined in Section 5.6.2 of Rule 4401) may be used unless they 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. [District Rule 4401, 5.7.1] Federally Enforceable Through Title V Permit
14. Each hatch shall be closed at all times except during attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage or material and VOC emissions into the atmosphere. [District Rule 4401, 5.7.2] Federally Enforceable Through Title V Permit
15. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.7.3] Federally Enforceable Through Title V Permit
16. Unless otherwise specified in Section 5.8, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.8] Federally Enforceable Through Title V Permit
17. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year. [District Rule 4401, 5.8.1] Federally Enforceable Through Title V Permit
18. 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 this Rule. [District Rule 4401, 5.8.2] Federally Enforceable Through Title V Permit
19. An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) 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. 2) 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 this Rule. [District Rule 4401, 5.8.3] Federally Enforceable Through Title V Permit
20. The operator shall also perform the following inspections: 1) An operator shall 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. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) Except for PRDs subject to the requirements of Section 5.8.4.1 of this Rule, 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
21. Except for PRDs subject to the requirements of Section 5.8.4.1, 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, 5.8.4.3] Federally Enforceable Through Title V Permit
22. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.8.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: CHEVRON USA INC

Location: HEAVY OIL WESTERN STATIONARY SOURCE, KERN COUNTY

S-1128-981-0, May 4 2014 9:18AM - EDGEHLR

23. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.8.6] Federally Enforceable Through Title V Permit
24. Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.9.1] Federally Enforceable Through Title V Permit
25. The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with this Rule. [District Rule 4401, 5.9.2] Federally Enforceable Through Title V Permit
26. 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
27. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 4: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.9.4] Federally Enforceable Through Title V Permit
28. 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
29. 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. [District Rule 4401, 5.9.5] Federally Enforceable Through Title V Permit
30. The time of the initial leak detection shall be the start of the repair period specified in Table 4. [District Rule 4401, 5.9.6] Federally Enforceable Through Title V Permit
31. 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
32. 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
33. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
34. Records shall be maintained 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. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
35. 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
36. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.9] Federally Enforceable Through Title V Permit
38. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
39. 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
40. 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
41. 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
42. 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
43. The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in this Rule, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4.1 through 6.4.10] Federally Enforceable Through Title V Permit
44. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

45. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to this Rule by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components, 5) Except for pipes, the location of components subject to this Rule, 6) Except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by this Rule and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 through 6.6.9] Federally Enforceable Through Title V Permit
46. By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit
47. The operator of any new steam-enhanced crude oil production well, or any non-steam-enhanced crude oil production well converted to a steam-enhanced crude oil production well, which commences steam-enhancement operations on or after April 11, 1991, shall comply with the requirements of this rule and the applicable permit requirements of Rule 2201 (New and Modified Stationary Source Review Rule) before steam injection and no later than the first detectable flow at the casing vent. [District Rule 4401, 7.1] Federally Enforceable Through Title V Permit
48. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.3, 4.4, 4.5, 4.8 or 4.9 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of this rule. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit
49. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4401, 6.1] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-617-21

EXPIRATION DATE: 02/29/2016

SECTION: SW31 TOWNSHIP: 12N RANGE: 23W

EQUIPMENT DESCRIPTION:

3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618,-620,-621,-622, -623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND '18 VIA 31E BOOSTER STATION OR TEOR VAPOR COLLECTION SYSTEM S-1128-125. (31EOCP)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Emissions from this tank and vapor control system shall not exceed 101.0 lbs VOC per day [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Permittee shall conduct API gravity and true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The efficiency of any VOC destruction device shall be measured by EPA Method 18 or 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times except as otherwise provided in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The API gravity and true vapor pressure (TVP) shall be determined using the latest methods specified in the most-recent version of District Rule 4623. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) prior to venting the tank to the atmosphere, operate the tank vapor control system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) vent the tank to a vapor control device/vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

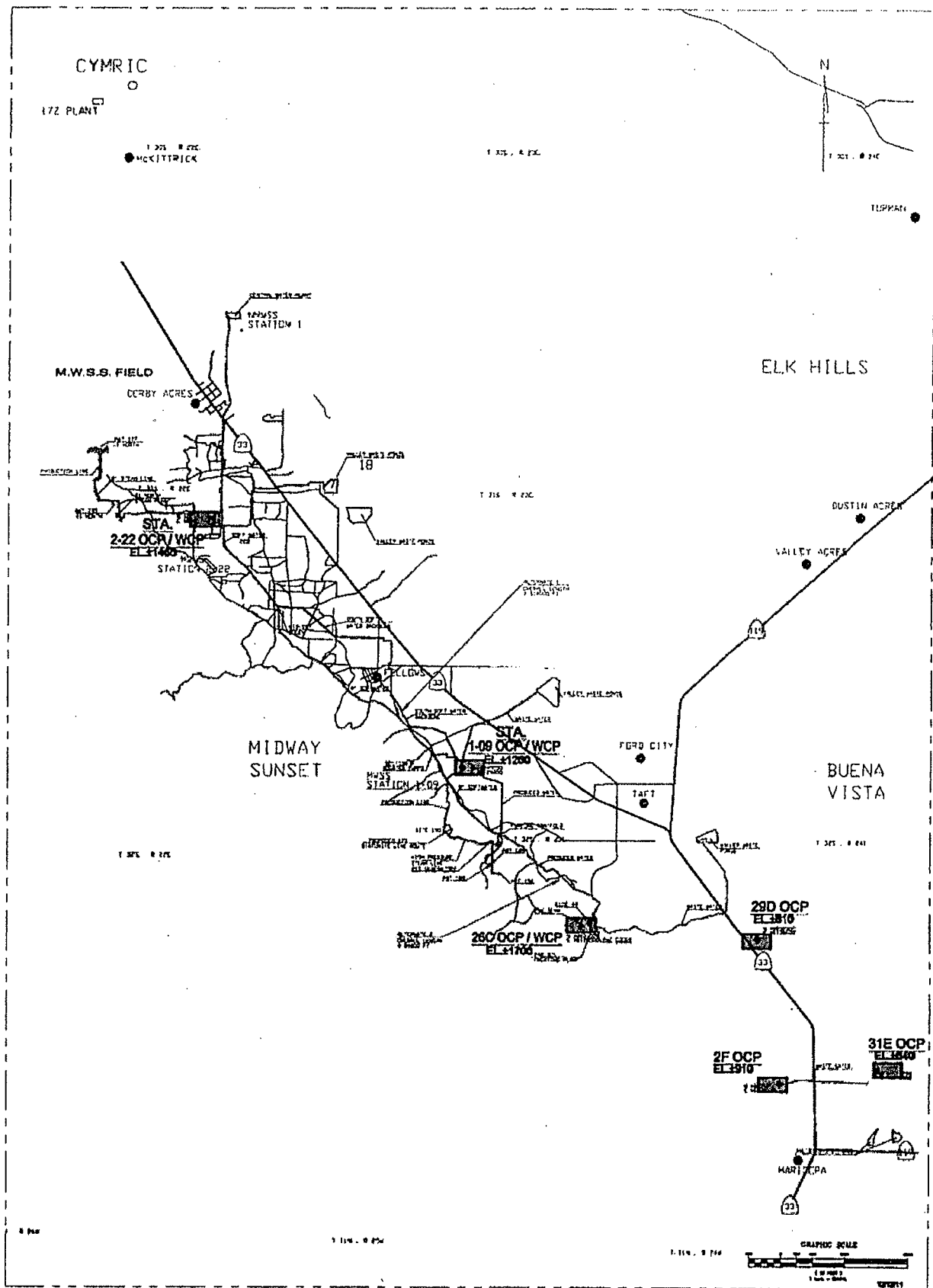
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Within 48 hours after refilling the tank, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA Method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
26. The requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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

ATTACHMENT II Project Location Map



ATTACHMENT III Emissions Profiles

Permit #: S-1128-617-23	Last Updated
Facility: CHEVRON USA INC	05/04/2014 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	36865.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	101.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-1128-981-2	Last Updated
Facility: CHEVRON USA INC	05/04/2014 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	19893.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	54.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-1128-1004-0	Last Updated
Facility: CHEVRON USA INC	05/07/2014 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	4080.0	8580.0	480.0	22200.0	3780.0
Daily Emis. Limit (lb/Day)	40.8	85.8	4.8	222.0	37.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1020.0	2145.0	120.0	5550.0	945.0
Q2:	1020.0	2145.0	120.0	5550.0	945.0
Q3:	1020.0	2145.0	120.0	5550.0	945.0
Q4:	1020.0	2145.0	120.0	5550.0	945.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5	1.5	1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	1530.0	3218.0	180.0		1418.0
Q2:	1530.0	3218.0	180.0		1418.0
Q3:	1530.0	3218.0	180.0		1418.0
Q4:	1530.0	3218.0	180.0		1418.0

Permit #: S-2010-3-12	Last Updated
Facility: CHEVRON USA INC	05/04/2014 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	13323.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	36.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2010-317-0	Last Updated
Facility: CHEVRON USA INC	05/07/2014 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	4080.0	8580.0	480.0	22200.0	3780.0
Daily Emis. Limit (lb/Day)	40.8	85.8	4.8	222.0	37.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1020.0	2145.0	120.0	5550.0	945.0
Q2:	1020.0	2145.0	120.0	5550.0	945.0
Q3:	1020.0	2145.0	120.0	5550.0	945.0
Q4:	1020.0	2145.0	120.0	5550.0	945.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

ATTACHMENT IV HRA and AAQA Modelling

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Steve Leonard, AQE – Permit Services
From: Trevor Joy, AQS – Compliance
Date: April 17, 2014
Facility Name: Chevron USA
Location: VARIOUS LOCATIONS, HOW & LOW
Application #(s): S-2010-317-0
Project #: 1141623 (1141607)

A. RMR SUMMARY

Categories	Unit 317-0 Waste Gas Flare	Project Totals	Facility Totals
Prioritization Score	1.5	1.5	>1
Acute Hazard Index	0.08	0.08	0.16
Chronic Hazard Index	0.00	0.00	0.04
Maximum Individual Cancer Risk (10^{-6})	0.0	0.0	2.8
T-BACT Required?	No		
Special Permit Conditions?	Yes		

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit # 317-0

Flare usage shall not exceed 60,000,000 scf/yr.

The flare must be at least 1,000 feet from the nearest receptor.

B. RMR REPORT

I. Project Description

Technical Services received a revised request on April 11, 2014 to perform an Ambient Air Quality Analysis and a Risk Management Review for the proposed installation of a 25 MMBtu/hr waste gas flare. The flare can be used at various location but must be 1000 feet from the nearest receptor.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Emissions were calculated using "NG Flare External Combustion" emission factors. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for the facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined analysis was required and performed. AERMOD was used, with the parameters outlined below and concatenated meteorological data for Bakersfield 2005 to 2009 to determine the maximum dispersion factor at the nearest residential and business receptors. These dispersion factors were input into the HARP model to calculate the chronic and acute hazard indices and the carcinogenic risk for the project. AERMOD was also used for the AAQA analysis, with the parameters outlined below and meteorological data for Bakersfield 2005 – 2009 to determine the maximum dispersion factors.

The following parameters were used for the review:

Analysis Parameter Unit 317-0 Flare			
Closest Receptor - Business (m)	305	Closest Receptor – Resident (m)	305
Flare usage (scf/hr)	25,000	Flare usage (scf/yr)	60,000,000
Effective Stack Height (m)	10.15	Gas Exit Temperature (K)	1273
Stack Inside Diameter (m)	0.91	Gas Exit Velocity (m/sec)	15.64

Technical Services also performed modeling for criteria pollutants CO, NO_x, SO_x and PM₁₀; as well as a RMR. The emission rates used for criteria pollutant modeling were

	NO _x	Sox	CO	PM10	PM2.5
Lbs/hr	1.7	0.07	9.25	0.2	0.2
Lbs/yr	4,080	171	22,200	480	480

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Values are in $\mu\text{g}/\text{m}^3$

Steam Generator	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass ²	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ³	Pass ³
PM2.5	X	X	X	Pass ³	Pass ³

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures. The criteria pollutant 1-hour value passed using TIER I NO₂ NAAQS modeling

²The project was compared to the 1-hour SO₂ National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusion

The acute and chronic hazard indices were below 1.0; and the cancer risk is less than or equal to 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments:

- A. RMR request from the project engineer
- B. Prioritization score with toxic emissions summary
- C. HEARTS – Facility Summary
- D. AAQA spreadsheet

ATTACHMENT V
Statewide Compliance Statement
Title V Compliance Certification Form



Donald Puckett
General Manager - Operations

San Joaquin Valley SBU
Chevron North America
Exploration and Production
P. O. Box 1392

February 26, 2014

Mr. Seyed Sadredin
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

RE: Statewide Compliance Certification

Dear Mr. Sadredin:

As required under District Rule 2201, Subsection 4.15.2 and Section 173(a)(3) of the Clean Air Act, 42 U.S.C. Section 7503, Chevron U.S.A. Inc. hereby submits this letter of certification regarding statewide compliance as of this date.

Based on reasonable inquiry and to the best of my knowledge and belief, the major stationary sources, as defined in the jurisdiction where the facilities are located, that are owned or operated by Chevron U.S.A. Inc. in the State of California as listed below are subject to emission limitations and are in compliance or on a schedule for compliance with all applicable emission limitations and standards under the Clean Air Act:

- El Segundo Refinery
- Richmond Refinery
- Banta Marketing Terminal
- Huntington Beach Marketing Terminal
- Montebello Marketing Terminal
- Sacramento Marketing Terminal
- Van Nuys Marketing Terminal
- Cross Valley Carneras Gas Compressor Facility in Kern County
- Kettleman City Pump Station in Kings County
- 27G Pump Station in Kern County

- San Joaquin Valley Business Unit:
 - Fresno County Heavy Oil Source (Coalinga)
 - Fresno County Natural Gas Source (Coalinga)
 - Kern County Central Heavy Oil Source (Kern River)
 - Kern County Western Heavy Oil Source (Midway Sunset & Cymric)
 - Kern County Western Light Oil Source (Midway Sunset, Cymric & Lost Hills)
 - Kern County Western Gas Source (Cymric & Lost Hills)
 - San Ardo (Monterey County)

Mr. Seyed Sadredin
Statewide Compliance Certification
February 26, 2014
Page 2

- Global Power (Joint Venture Facilities):
 - Coalinga Cogeneration Company in Fresno County
 - Kern River Cogeneration Company in Kern County
 - Mid-Set Cogeneration Company in Kern County
 - Salinas River Cogeneration Company in Monterey County
 - Sargent Canyon Cogeneration Company in Monterey County
 - Sunrise Power Company LLC in Kern County
 - Sycamore Cogeneration Company in Kern County

Please telephone Martin Lundy at (661) 654-7142 or Daniel Beck at (661) 654-7141 if there are questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Donald Puckett', with a long horizontal stroke extending to the right.

Donald Puckett
General Manager - Operations

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☒ SIGNIFICANT PERMIT MODIFICATION
☐ MINOR PERMIT MODIFICATION

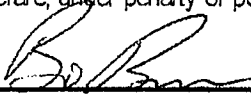
☐ ADMINISTRATIVE
AMENDMENT

COMPANY NAME: CHEVRON U.S.A. INC.	FACILITY ID: S- 1128
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: CHEVRON U.S.A. INC.	
3. Agent to the Owner: N/A	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



Signature of Responsible Official

4-24-14

Date

Bo Bravo

Name of Responsible Official (please print)

Plant Supervisor

Title of Responsible Official (please print)

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☒ SIGNIFICANT PERMIT MODIFICATION
☐ MINOR PERMIT MODIFICATION

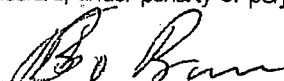
☐ ADMINISTRATIVE
AMENDMENT

COMPANY NAME: CHEVRON U.S.A. INC.	FACILITY ID: S- 2010
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: CHEVRON U.S.A. INC.	
3. Agent to the Owner: N/A	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:


Signature of Responsible Official

4-24-14
Date

Bo Bravo

Name of Responsible Official (please print)

Plant Supervisor

Title of Responsible Official (please print)

ATTACHMENT VI

Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1128-617-23

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: P O BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY

SECTION: SW31 TOWNSHIP: 12N RANGE: 23W

EQUIPMENT DESCRIPTION:

MODIFICATION OF 3,000 BBL FIXED ROOF PRODUCED WATER TANK #T-6 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1128-618, -620, -621, -622, -623, AND -625, AND TEOR SYSTEM S-1128-981, DISCHARGING VAPORS TO STEAM GENERATORS S-1128-15 AND '18 VIA 31E BOOSTER STATION OR TEOR VAPOR COLLECTION SYSTEM S-1128-125 (31EOCP); AUTHORIZE USE OF FLARE (PERMIT S-1128-1004) AS CONTROL DEVICE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. ATC shall be implemented concurrently with or subsequent to ATC S-1128-1004-0. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 4623, 5.3.1] Federally Enforceable Through Title V Permit
5. 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

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

S-1128-617-23 : May 9 2014 1:58PM -- EDGEHILR : Joint Inspection NOT Required

6. Emissions from this tank and vapor control system shall not exceed 101.0 lbs VOC per day [District Rule 2201] Federally Enforceable Through Title V Permit
7. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall conduct API gravity and true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
14. The efficiency of any VOC destruction device shall be measured by EPA Method 18 or 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
15. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times except as otherwise provided in this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The API gravity and true vapor pressure (TVP) shall be determined using the latest methods specified in the most-recent version of District Rule 4623. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
18. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
19. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) prior to venting the tank to the atmosphere, operate the tank vapor control system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) vent the tank to a vapor control device/vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. 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
27. Within 48 hours after refilling the tank, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA Method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
28. {982} Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
29. {983} The requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
30. {984} The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
33. The permittee shall keep accurate records of each organic liquid stored in the tank including its type, storage temperature, TVP, and API gravity, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

34. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1128-981-2

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: P O BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY

SECTION: 1 TOWNSHIP: 11N RANGE: 24W

EQUIPMENT DESCRIPTION:

MODIFICATION OF TEOR OPERATION WITH UP TO 100 WELLS INCLUDING OPEN OR CLOSED CASING VENTS WITH A CASING GAS COLLECTION SYSTEM INCLUDING HEAT EXCHANGERS, GAS/LIQUID SEPARATORS AND COMPRESSORS, WITH THE VAPORS PIPED TO THE 31E BOOSTER COMPRESSOR FACILITY OF THE VAPOR RECOVERY SYSTEM LISTED ON TANK PERMIT S-1128-617: AUTHORIZE USE OF FLARE S-1128-1004 AS CONTROL DEVICE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. ATC shall be implemented concurrently with or subsequent to ATC S-1128-1004-0. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The Permittee shall maintain with the permit accurate fugitive component counts for components in gas/vapor service, and the resulting emissions calculations using the emissions factors in Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

S-1128-981-2; May 9 2014 1:58PM - EDGEHILL - Joint Inspection NOT Required

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5. VOC content of the non-condensable casing vapors shall not exceed 81% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain with the permit a current roster of all the wells included in this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fugitive emissions from the TEOR system components shall not exceed 54.5 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The operator shall test the TEOR gas annually for VOC content at the header upstream of the 31E Oil Cleaning Plant. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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 requirements of District Rule 4401. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
10. Fluids produced from steam-enhanced wells with closed well casing vents shall be introduced only to front line production equipment vented to a District-approved vapor collection and control system as defined in Section 3.50 of Rule 4401, or to gauge tanks as defined in Section 3.17 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. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
11. For wells with the casing vents open, the well vent shall be connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
12. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.6.2.1] Federally Enforceable Through Title V Permit
13. There shall be no components with a major liquid leak as defined in Section 3.20.2 of Rule 4401. [District Rule 4401, 5.6.2.2] Federally Enforceable Through Title V Permit
14. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.6.2.3] Federally Enforceable Through Title V Permit
15. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401, 5.6.2.4] Federally Enforceable Through Title V Permit
16. No leaking components (as defined in Section 5.6.2 of Rule 4401) may be used unless they 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. [District Rule 4401, 5.7.1] Federally Enforceable Through Title V Permit
17. Each hatch shall be closed at all times except during attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions into the atmosphere. [District Rule 4401, 5.7.2] Federally Enforceable Through Title V Permit
18. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.7.3] Federally Enforceable Through Title V Permit
19. Unless otherwise specified in Section 5.8, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.8] Federally Enforceable Through Title V Permit
20. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year. [District Rule 4401, 5.8.1] Federally Enforceable Through Title V Permit

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21. 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 this Rule. [District Rule 4401, 5.8.2] Federally Enforceable Through Title V Permit
22. An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) 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. 2) 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 this Rule. [District Rule 4401, 5.8.3] Federally Enforceable Through Title V Permit
23. The operator shall also perform the following inspections: 1) An operator shall 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. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) Except for PRDs subject to the requirements of Section 5.8.4.1 of this Rule, 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
24. Except for PRDs subject to the requirements of Section 5.8.4.1, 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, 5.8.4.3] Federally Enforceable Through Title V Permit
25. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.8.5] Federally Enforceable Through Title V Permit
26. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.8.6] Federally Enforceable Through Title V Permit
27. Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.9.1] Federally Enforceable Through Title V Permit
28. The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with this Rule. [District Rule 4401, 5.9.2] Federally Enforceable Through Title V Permit
29. 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
30. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 4: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.9.4] Federally Enforceable Through Title V Permit
31. 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
32. 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. [District Rule 4401, 5.9.5] Federally Enforceable Through Title V Permit

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33. The time of the initial leak detection shall be the start of the repair period specified in Table 4. [District Rule 4401, 5.9.6] Federally Enforceable Through Title V Permit
34. 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
35. 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
36. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
37. Records shall be maintained 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. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
38. 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
39. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
40. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.9] Federally Enforceable Through Title V Permit
41. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
42. 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
43. 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
44. 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
45. 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

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CONDITIONS CONTINUE ON NEXT PAGE

46. The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in this Rule, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4.1 through 6.4.10] Federally Enforceable Through Title V Permit
47. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit
48. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to this Rule by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components, 5) Except for pipes, the location of components subject to this Rule, 6) Except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by this Rule and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 through 6.6.9] Federally Enforceable Through Title V Permit
49. By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit
50. The operator of any new steam-enhanced crude oil production well, or any non-steam-enhanced crude oil production well converted to a steam-enhanced crude oil production well, which commences steam-enhancement operations on or after April 11, 1991, shall comply with the requirements of this rule and the applicable permit requirements of Rule 2201 (New and Modified Stationary Source Review Rule) before steam injection and no later than the first detectable flow at the casing vent. [District Rule 4401, 7.1] Federally Enforceable Through Title V Permit
51. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.3, 4.4, 4.5, 4.8 or 4.9 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of this rule. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit
52. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4401, 6.1] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1128-1004-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: P O BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY

EQUIPMENT DESCRIPTION:

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

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: NOx 1,530 lb/qtr, SOx 3218 lb/qtr, PM10 180 lb/qtr, and VOCs 1,418 lb/qtr. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4195-2, S-2080-5, S-2035-4, and S-3365-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjolle, Director of Permit Services

S-1128-1004-0: May 13 2014 11:22AM - EDGEHILL : Joint Inspection NOT Required

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5. 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
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
7. Flare shall not operate within 1000 ft from a receptor (business or residence). [District Rule 4102]
8. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
9. 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
10. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
11. 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
12. 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
13. Flare shall be equipped with operational automatic re-ignition provisions. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
14. Daily flared gas heat input, except pilot fuel, shall not exceed 600 MMBtu per day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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
16. Flared gas sulfur content shall not exceed 50.0 gr S/100 scf or 800 ppmv H₂S. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: 0.008 lb-PM₁₀/MMBtu, 0.068 lb-NO_x/MMBtu (as NO₂), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
18. 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
19. 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
20. 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
21. 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

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-2010-3-12

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: 29 **TOWNSHIP:** 32S **RANGE:** 24E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 5,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK "T-2" WITH VAPOR CONTROL SYSTEM SHARED WITH S-2010-8 AND '9 DISCHARGED TO THE GAS SALES PIPELINE AND/OR THE 31E BOOSTER STATION (29D OIL CLEANING PLANT): AUTHORIZE FLARE S-2010-317 AS CONTROL DEVICE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. ATC shall be implemented concurrently with or subsequent to ATC S-2010-317-0. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank. The vapor recovery system shall be APCO-approved, maintained in a leak-free condition, and capable of reducing VOC emissions by at least 99% by weight. [District NSR Rule] 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 NSR Rule and 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

S-2010-3-12 : May 9 2014 1:57PM - EDGEHILR : Joint Inspection NOT Required

6. The permittee shall maintain records of number and type of components installed. Permittee shall update such records when new components are installed. Compliance with permitted VOC emissions shall be calculated from the permittee's records of the number and type of components installed. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Fugitive VOC emissions from component leaks shall be calculated using the EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations Average Emission Factors. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Fugitive VOC emissions from component leaks shall not exceed 36.5 lb/day and 13,323 lb/yr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
10. 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
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 4623, 5.6.3] Federally Enforceable Through Title V Permit
12. 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
13. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during four consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. 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
15. 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
16. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. 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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CONDITIONS CONTINUE ON NEXT PAGE

18. 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
19. 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
20. 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, 9.4.1] Federally Enforceable Through Title V Permit
21. 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
22. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
23. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
24. The 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
25. 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 explosive limit (LEL), whichever is less; or (2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or (3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, refilling the tank with an organic liquid, and maintenance operations. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
29. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid is placed, held, or stored in this tank. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

30. While performing tank cleaning activities, operators may only use the following cleaning agents: water, hot water, 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. The tank sediment may be used as road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
31. 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
32. During sludge removal from tanks containing organic liquids 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, 5.7] Federally Enforceable Through Title V Permit
33. The permittee shall only transport removed sludge from tanks containing organic liquids with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623, 5.7] Federally Enforceable Through Title V Permit
34. The permittee shall store removed sludge from tanks containing organic liquids 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. 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
35. The permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
36. The operator shall maintain records of required monitoring data and support information for inspection at any time for a period of five years. The records shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-2010-317-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

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

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. 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
4. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Flare shall not operate within 1000 ft from a receptor (business or residence). [District Rule 4102]
6. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
7. 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

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjolle, Director of Permit Services

S-2010-317-0 : May 13 2014 11:22AM - EDGEHLR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

8. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
9. 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
10. 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
11. Flare shall be equipped with operational automatic re-ignition provisions. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
12. Daily flared gas heat input, except pilot fuel, shall not exceed 600 MMBtu per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. 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
14. Flared gas sulfur content shall not exceed 50.0 gr S/100 scf or 800 ppmv H₂S. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: 0.008 lb-PM₁₀/MMBtu, 0.068 lb-NO_x/MMBtu (as NO₂), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. 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
18. 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
19. 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
20. This ATC shall be implemented concurrently with ATC S-1128-1004-0. [District Rule 2201] Federally Enforceable Through Title V Permit

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