



Mr. Kris Rickards
Chevron USA, Inc.
P.O. Box 1392
Bakersfield, CA 93302

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1128
Project # S-1160063**

Dear Mr. Rickards:

Enclosed for your review is the District's analysis of an application for Authority to Construct (ATC) for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. This ATC modifies permit S-1128-934 visible emissions inspection requirements for an existing 4.98 MMBtu/hr flare with continuous natural gas/LPG pilot incinerating produced gas and allows incineration of TEOR gas.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate 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 Authority 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 Marjolle
Director of Permit Services

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Modify Flare Visible Emissions Inspection Requirements

Facility Name: Chevron USA, Inc.	Date: 4/6/2016
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Application #: S-1128-934-12	
Project #: S-1160063	
Deemed Complete: 2/22/2016	

I. Proposal

The primary business of Chevron USA Inc. (CUSA) is oil and gas production. CUSA is requesting an Authority to Construct (ATC) to modify permit S-1128-934 visible emissions inspection requirements for existing 4.98 MMBtu/hr flare with continuous natural gas/LPG pilot incinerating produced gas.

Project S-113694 removed the requirement for two-hour Method 22 visible emissions observations to be made annually, because "from a review of the compliance inspection history of the subject flare; visible emissions exceeding 0% opacity for more than 5 minutes in a two hour period have not been observed... the District has determined than an annual visible emissions demonstration by the operator pursuant to EPA Method 22 is not warranted and will delete the requirement for such demonstration as requested by Chevron". Therefore, project #113694 changed the requirement for two-hour Method 22 visible emissions observations as follows: "Demonstration of compliance with the visible emissions limit of this permit shall be conducted ~~at least annually~~ using EPA Method 22. The observation period shall be 2 hours. [40 CFR 60.18(f)(1)]"

However, the current permit conditions relating to visible emissions observations are confusing; condition 2 specifies that a two-hour observation period shall be used, but doesn't specify when this two-hour inspection is necessary. Meanwhile, condition 3 specifies that the flare shall be inspected every two weeks while in operation, but does not specify the observation period. Therefore CUSA is requesting to change

the permit language as shown below. Strikethrough indicates a deletion and underline indicates insertion.

- Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. ~~The observation period shall be 2 hours.~~ Upon District request, a two-hour observation shall be conducted. [40 CFR 60.18(f)(1)]
- This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2]

Additionally, CUSA would like to clarify in the equipment description that in addition to produced gas, TEOR gas may also be incinerated by the flare.

CUSA has a Title V Permit. This modification can be classified as a Title V significant modification pursuant to Rule 2520, 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. CUSA must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (2/18/16) – N/A
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99) – N/A
Rule 4101 Visible Emissions (02/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4311 Flares (06/18/09)
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, Div 6, Chap 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment is located in CUSA's Heavy Oil Western stationary source in the Cymric Oil Field, within Section 31, Township 29S, Range 17E (MDB&M). The equipment is not located 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.

IV. Process Description

Chevron's Antelope Lease production primarily consists of free flowing, steam-enhanced, heavy oil wells. The casing gas from the wells (TEOR gas) is combined with the produced oil at the well head. The oil/gas mixture is then directed to a gas/liquid separator where the TEOR gas is separated from the production stream and sent to Chevron's SulFerox Plant (S-1128-116) for disposal/incineration. The remaining produced fluids, oil and water, are sent to Chevron's 31X Oil Cleaning Plant for processing. In the event of equipment malfunction or production surges, some of the TEOR gas may stay entrained in the oil/water production line leading to the 31X plant.

As all of the production tanks at the 31X plant are equipped with vapor recovery, minor fluctuations in the amount of gas entrained in the oil can be handled by existing vapor recovery equipment. However, in extreme cases, the tank vapor recovery system cannot handle the increased gas flow. Although the fluctuations may occur for only seconds or minutes at a time, the release of gas from the tanks would result in non-compliance with District rules and result in a safety hazard from high H₂S levels.

Vapors separated at vessels V-2 (S-1128-248) and V-2A (S-1128-950), the inlet separators to the 31X OCP, are routed into the vapor piping network associated with the 31X TEOR casing collection system (S-1128-128). The vapors are normally routed to the control/disposal options associated with the 36W casing collection system #1(S-1128-116), but can also be incinerated at the 31X flare (S-1128-934) during production surges and upsets. Similarly, the 31X flare can also receive tank vapors from the 31X OCP vapor recovery system (S-1128-248) if disruptions and/or pressure build-up prevents the vapors from flowing to the downstream control/disposal options associated with S-1128-116. In summary, the 31X flare can incinerate vapors from the following sources:

- Separator Vessel V-2 (associated with S-1128-248),
- Separator Vessel V-2A (S-1128-950),
- 31X TEOR Casing Collection System (S-1128-128), and
- 31X OCP Tank VRU (S-1128-248)

A process diagram is provided in **Attachment II**.

V. Equipment Listing

Pre-Project ATC Equipment Description

S-1128-934-11 4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS

Proposed ATC Modifications

S-1128-934-12 MODIFICATION OF 4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS: CHANGE CONDITION 2 TO CLARIFY THAT CLARIFY THAT TWO-HOUR OBSERVATIONS ARE ONLY NECESSARY UPON DISTRICT REQUEST, CHANGE CONDITION 3 TO CLARIFY THAT THE OBSERVATION PERIOD IS 15 MINUTES, AND MODIFY EQUIPMENT DESCRIPTION TO CLARIFY THAT TEOR GAS MAY ALSO BE INCINERATED BY THE FLARE.

Modified conditions:

- Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. ~~The observation period shall be 2 hours.~~ Upon District request, a two-hour observation shall be conducted. [40 CFR 60.18(f)(1)]
- This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2]

Post-Project Equipment Description

S-1128-934-12 4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS/TEOR GAS.

VI. Emission Control Technology Evaluation

The flare is of open-pipe design, with natural gas or LPG pilot, flame stabilizers, and wind shrouds. The carbon over hydrogen ratio (C/H) of the waste gas is 0.25 (refer to Attachment IV of project #1132186 for C/H ratio calculations). According to the EPA's 'OAQPS Control Cost Manual', flare gases with a C/H ratio of 0.35 or greater may smoke unless air- or steam-assist is used. As the waste gas incinerated in the flare has a C/H ratio of less than 0.35, excess visible emissions in the form of black smoke are not expected. In addition, the actual TEOR gas stream may contain up to 75% water vapor (steam) per Chevron during surges. The additional water vapor is expected to further reduce the possibility of smoking.

VII. General Calculations

This project is not an NSR modification (see Section VIII below). Therefore emissions calculations need not be performed for the purpose of NSR.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

Rule 2201 applies to all new stationary sources and all modifications to existing stationary sources which are subject to the District permit requirements and after construction emit or may emit one or more affected pollutant.

This project does not involve a new stationary source. Furthermore, this project is not a modification, as explained below.

Rule 2201 Section 3.25.1 defines a modification as an action including at least one of the following items:

- Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- Addition of any new emissions unit which is subject to District permitting requirements.
- A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

As detailed in Section I above, this project involves modification of monitoring conditions only. Therefore this project does not involve a change in hours of operation, change in production rate, change in method of operation, a structural change, an increase in emissions, addition of new emissions units, or a change in a permit term or condition proposed by an applicant to obtain an exemption. Since this project is not considered a modification under Rule 2201, this rule is not applicable.

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 involves changes to monitoring conditions, so it does not qualify as a minor permit modification. Therefore this is 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. Continued compliance with this rule is expected. The facility may operate under the ATC upon submittal of the Title V administrative amendment application. Included in **Attachment IV** is CUSA's Title V Compliance Certification form.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates the New Source Performance Standards from 40 CFR Part 60. Provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. As explained in Section I above, there is no construction associated with this project. Furthermore, this project is not a modification under NSPS, as explained below.

Per 40 CFR §60.14, a modification is "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies". This project does not involve an increase in emission rate of any pollutant and is therefore not considered a modification under NSPS.

Except with respect to the discussion of §60.18(f)(1) (below) this project is not subject to Rule 4001 and no further discussion is required.

The conditions that Chevron is proposing to modify with respect to opacity monitoring frequency reference 40 CFR §60.18(f)(1), which states:

“(f)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.”

This section and no other section reference monitoring frequency with respect to opacity measurements, therefore it is up to the District's (the EPA delegated authority) discretion to determine the opacity monitoring frequency.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge air contaminant shall which is as dark as or darker than 20% opacity. Per Section 5.0, 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 expected to operate in a smokeless manner. Also, based on past inspections of the facility, continued compliance is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants that 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.

Since this project does not involve an increase in emissions, a health risk assessment is not necessary.

Rule 4311 Flares

This rule limits VOC and NOx emissions from flares.

Section 5.1 states that the requirements of Sections 5.6 and 5.7 do not apply to emergency flares. Since this flare is not an emergency flare, Sections 5.6 and 5.7 do apply.

Section 5.2 requires that a flame be present at all times when combustible gases are vented through the flare. The following condition satisfies this requirement:

- Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)]

Section 5.3 requires an auto ignition system if a continuously burning pilot flame is not present at all times and therefore is not applicable.

Section 5.4 requires that a device be installed that continuously detects at least one pilot light. The ATC includes the following condition:

- Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)]

Section 5.5 applies to flares that do not have a continuous pilot light flame, and is not applicable to the subject flare of this permit unit.

Section 5.6 states that open flares (air assisted, steam assisted, and non-assisted) shall operate in compliance with the provisions of 40 CFR 60.18. The subject flare is an open pipe flare. The following conditions are included on the ATC:

- Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)]
- Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. The observation period shall be 2 hours. Upon District request, a two-hour observation shall be conducted. [40 CFR 60.18(0(1))]
- This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2]
- The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2]
- Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is air-assisted or steam assisted. [40 CFR 60.18 (c)(3)]

- The net heating value of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(0(3) and using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (0(3-6)]
- Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)]
- Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (0(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)]
- Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (0(4), less than the velocity, V_{max} , as determined by the equation specified in paragraph 40 CFR 60.18 (0(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)]
- The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (0(4)]
- Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (0(2)] Y

Section 6.2.3 contains record keeping requirements for emergency flares, which is not applicable to this flare.

Rule 4801 Sulfur Compounds

This rule contains a limit on sulfur compounds. The limit at the point of discharge is 0.2 percent by volume, 2000 ppmv, calculated as sulfur dioxide (SO₂), on a dry basis averaged over 15 consecutive minutes.

There are no emissions increases associated with this project. As demonstrated in project #1132186, the flare is expected to operate within compliance of District Rule 4801.

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)

The California Environmental Quality Act (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 San Joaquin Valley Unified Air Pollution Control District (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.
- 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.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. Consistent with CCR §15064(h)(3), the District will find that compliance with ARB's Cap and Trade regulation would avoid or substantially lessen the impact of project-specific GHG emissions on global climate change. The District will also find that the ARB's Cap and Trade regulation was supported by an appropriate CECA-equivalent analysis. The District will therefore conclude that GHG emissions increases subject to ARB's Cap and Trade regulation would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) do not trigger Best Available Control Technology (BACT) and do not trigger Toxic Best Available Control Technology (T-BACT) requirements.

Issuance of permits for emissions units not subject to BACT or T-BACT requirements 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. Issue ATC S-1128-934-12 subject to the permit conditions on the attached draft ATC in **Attachment III**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1128-934-12	3020-02-F	4.98 MMBtu/hr	\$ 637.00

Attachments

- I. Current Permit
- II. Process Diagram
- III. Draft ATC
- IV. Title V Compliance Certification Form

ATTACHMENT I

Current Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1128-934-11

EXPIRATION DATE: 02/29/2016

SECTION: 31 TOWNSHIP: 29S RANGE: 22E

EQUIPMENT DESCRIPTION:

4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING PRODUCED GAS

PERMIT UNIT REQUIREMENTS

1. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. The observation period shall be 2 hours. [40 CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is air-assisted or steam-assisted. [40 CFR 60.18 (c)(3)] Federally Enforceable Through Title V Permit
6. The net heating value of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(f)(3) and using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3-6)] Federally Enforceable Through Title V Permit
7. Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
8. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit
9. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than the velocity, V_{max} , as determined by the equation specified in paragraph 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
10. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit
11. Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

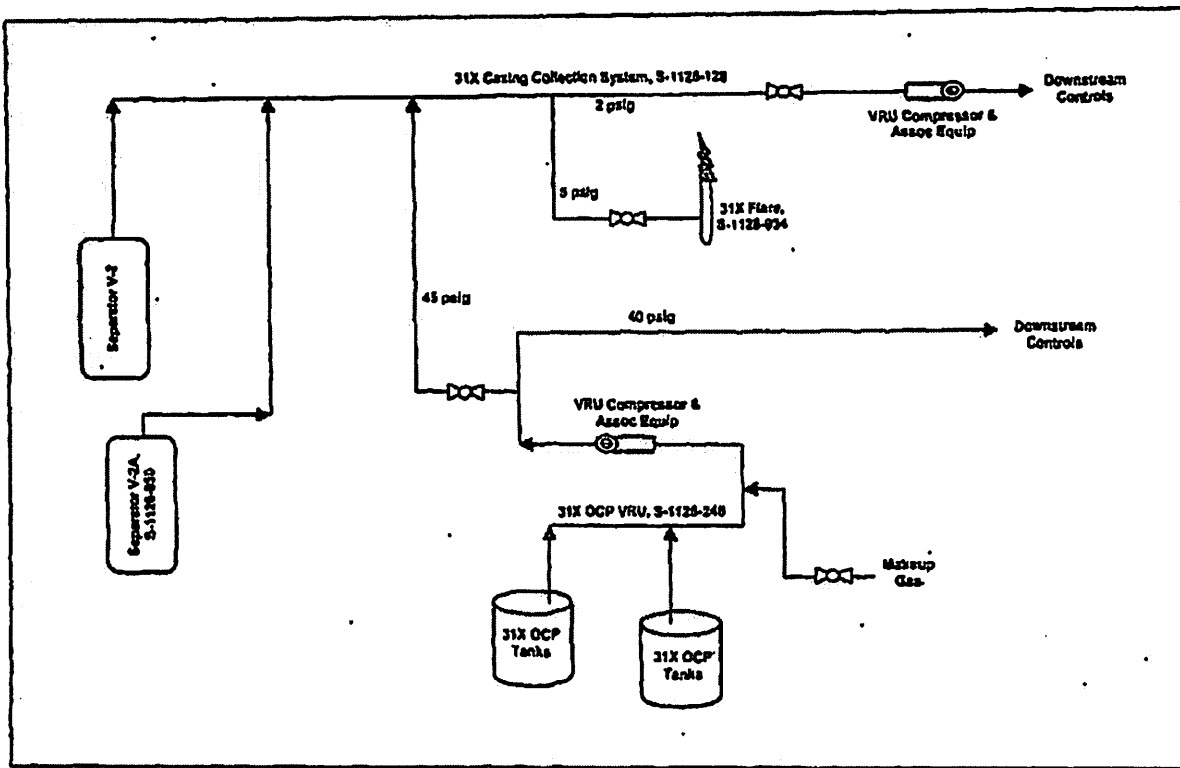
These terms and conditions are part of the Facility-wide Permit to Operate.

12. If flare is not operating, gas shall not be vented to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Gas flow rate to flare, except pilot and purge gas, shall not exceed 140,400 dscf per day. [District NSR Rule]
14. Gas flow rate to flare, except pilot and purge gas, shall not exceed 2,500,800 dscf per year. [District NSR Rule] Federally Enforceable Through Title V Permit
15. The combined daily flow rate of pilot and purge gas shall not exceed 20,000 dscf of natural gas per day or 5,580 scf/day (153.8 gal/day) of liquefied petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
16. Concentration of sulfur (as H₂S) in gas flared shall not exceed 30,000 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Permittee shall determine the moisture content of flared gas during an actual flaring episode at least once each calendar quarter in which a flare episode occurs. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Permittee shall determine sulfur content of gas flared at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Emissions from flared gas shall not exceed any of the following (based on total gas combusted): PM-10: 6.4 lb/mmscf; NO_x (as NO₂): 54.4 lb/mmscf; VOC: 50.4 lb/mmscf; or CO: 296.0 lb/mmscf. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Emission rate from natural gas pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.1 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM10 - 0.0076 lb/MMBtu, CO - 0.084 lb/MMBtu, or VOC - 0.0055 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
21. Emission rate from LPG/propane pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM10 - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
22. Permittee shall maintain daily and annual records of pilot and purge gas flow volumes (LPG/propane and natural gas), daily and annual records of wet & calculated dry flared gas flow volumes, quarterly records of flared gas moisture content, and annual records of flared gas sulfur content. Records shall be kept for at least five years and shall be made readily available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit

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

ATTACHMENT II
Process Diagram

Vapor Flow Diagram for 31X Flare S-1128-934



ATTACHMENT III

Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1128-934-12

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: 31 TOWNSHIP: 29S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 4.98 MMBTU/HR FLARE WITH CONTINUOUS NATURAL GAS/LPG PILOT INCINERATING
PRODUCED GAS: CLARIFY THAT VISIBLE EMISSION MONITORING USING METHOD 22 IS TO BE CONDUCTED
ONLY UPON DISTRICT REQUEST AND ALLOW THE INCINERATION OF TEOR GAS

CONDITIONS

1. {649} Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Demonstration of compliance with the visible emissions limit of this permit shall be conducted using EPA Method 22. Upon District request, a two hour observation shall be conducted. [40 CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. This flare shall be inspected every two weeks while in operation for visible emissions. The observation period shall be 15 minutes. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. {652} The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. {654} Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is air-assisted or steam-assisted. [40 CFR 60.18 (c)(3)] Federally Enforceable Through Title V Permit

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

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Arnaud Marjolle, Director of Permit Services

9-1128-934-12 : Apr 7 2010 1:46PM - RINALDIR : Joint Inspection NOT Required

6. The net heating value of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(f)(3) and using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3-6)] Federally Enforceable Through Title V Permit
7. {657} Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
8. {658} Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit
9. {659} Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than the velocity, V_{max} , as determined by the equation specified in paragraph 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
10. {660} The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit
11. {661} Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)] Federally Enforceable Through Title V Permit
12. If flare is not operating, gas shall not be vented to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Gas flow rate to flare, except pilot and purge gas, shall not exceed 140,400 dscf per day. [District NSR Rule]
14. Gas flow rate to flare, except pilot and purge gas, shall not exceed 2,500,800 dscf per year. [District NSR Rule] Federally Enforceable Through Title V Permit
15. The combined daily flow rate of pilot and purge gas shall not exceed 20,000 dscf of natural gas per day or 5,580 scf/day (153.8 gal/day) of liquefied petroleum gas (LPG). [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
16. Concentration of sulfur (as H₂S) in gas flared shall not exceed 30,000 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Permittee shall determine the moisture content of flared gas during an actual flaring episode at least once each calendar quarter in which a flare episode occurs. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Permittee shall determine sulfur content of gas flared at least once per year using ASTM method D3246 or double GC for H₂S and mercaptans. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Emissions from flared gas shall not exceed any of the following (based on total gas combusted): PM-10: 6.4 lb/mmscf; NO_x (as NO₂): 54.4 lb/mmscf; VOC: 50.4 lb/mmscf; or CO: 296.0 lb/mmscf. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Emission rate from natural gas pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.1 lb/MMBtu, SO_x - 0.00285 lb/MMBtu, PM10 - 0.0076 lb/MMBtu, CO - 0.084 lb/MMBtu, or VOC - 0.0055 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit
21. Emission rate from LPG/propane pilot and purge gas shall not exceed any of the following: NO_x (as NO₂) - 0.14 lb/MMBtu, SO_x - 0.0164 lb/MMBtu, PM10 - 0.0077 lb/MMBtu, CO - 0.082 lb/MMBtu, and VOC - 0.0087 lb/MMBtu. [District Rule 2020] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

22. Permittee shall maintain daily and annual records of pilot and purge gas flow volumes (LPG/propane and natural gas), daily and annual records of wet & calculated dry flared gas flow volumes, quarterly records of flared gas moisture content, and annual records of flared gas sulfur content. Records shall be kept for at least five years and shall be made readily available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit

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ATTACHMENT IV

Title V Compliance Certification Form



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

RECEIVED
NOV 18 2015

SJVAPCD
Southern Region



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION 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:

Carter
Signature of Responsible Official

11/17/15
Date

Cory Carter
Name of Responsible Official (please print)

Plants Supervisor - MWSS
Title of Responsible Official (please print)