



APR 24 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**
District Facility # S-1141
Project # S-1100723

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Chevron U.S.A., Inc. is proposing a Title V minor permit modification to incorporate the recently issued S-1141-250-25 and '529-15 into the Title V operating permit. Chevron proposes to remove references to steam generators that no longer burn TEOR gas from unit S-1141-250 and increase the heat input rating of unit S-1141-529.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1141-250-25 and '529-15, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,



David Warner
Director of Permit Services

Enclosures



APR 24 2012

John Gruber
Chevron U.S.A., Inc.
P.O. Box 1392
Bakersfield, CA 93302

**Re: Notice of Minor Title V Permit Modification
District Facility # S-1141
Project # S-1100723**

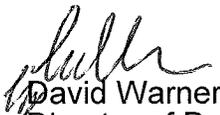
Dear Mr. Gruber:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-1141-250-25 and '-529-15 into the Title V operating permit. Chevron proposes to remove references to steam generators that no longer burn TEOR gas from unit S-1141-250 and increase the heat input rating of unit S-1141-529.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1141-250-25 and '-529-15, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,



David Warner
Director of Permit Services

Enclosures

TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1100723

Engineer: Kris Rickards
Date: April 18, 2012

RWK
4-19-12

Facility Number: S-1141
Facility Name: Chevron U.S.A., Inc.
Mailing Address: P.O. Box 1392
Bakersfield, CA 93302

Contact Name: John Gruber
Phone: 661-654-7144

Responsible Official: William Fall
Title: SJVBU HES Manager

I. PROPOSAL

Chevron U.S.A., Inc. is proposing a Title V minor permit modification to incorporate the recently issued S-1141-250-25 and '529-15 into the Title V operating permit. Chevron proposes to remove references to steam generators that no longer burn TEOR gas from unit S-1141-250 and increase the heat input rating of unit S-1141-529 and eliminate TEOR gas firing ability of this unit.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

These steam generators are located at the Cymric and Midway Sunset Oilfields within Chevron's Heavy Oil Western Stationary Source.

III. EQUIPMENT DESCRIPTION

S-1141-250-26: TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS

S-1141-529-16: 69.0 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

S-1141-250:

Condition 10 on the Permit to Operate was modified as follows added to ensure compliance with District Rule 4101:

- Authorized incineration sources for collected vapors include steam generators S-1141-44, '45, '46, '52, '53, '55, '60, '61, '391, '392, '515, '516, '517, '518, '519, '526, '528. [District Rule 2201]

S-1141-529:

The equipment description was modified as follows to reflect changes in heat input rating and rescission of casing gas firing ability:

~~62.569.0~~ MMBTU/HR NATURAL GAS/~~CASING~~ GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

Condition 2 on the draft Permit to Operate was added to ensure compliance with District Rule 4320:

- Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320]

Condition 2 on the Permit to Operate was modified as follows since the sulfur emissions limit was converted to a fuel sulfur limit:

- Emissions from the steam generator shall not exceed any of the following limits: ~~0.035 lb-SO_x/MMBtu, 0.0100 lb-PM₁₀/MMBtu, or 0.0030 lb-VOC/MMBtu.~~ [District Rule 2201]

Condition 3 on the Permit to Operate was modified as follows due to reduced emission limits for compliance with Rule 4320:

- Except during start-up and shutdown, and as provided below, emissions from the steam generator shall not exceed any of the following limits: ~~45~~10.5 ppmvd NO_x @ 3% O₂ or ~~0.04820~~0.0128 lb-NO_x/MMBtu or 25 ppmvd CO @ 3% O₂ or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, ~~and 4306, and 4320~~]

Condition 4 on the Permit to Operate was modified as follows due to reduced emission limits:

- During start-up and shutdown, emissions from the steam generator shall not exceed either of the following limits: ~~0.40~~0.036 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

Condition 5 on the Permit to Operate was modified as follows due to changed emission limits from both complying with Rule 4320 and the heat input being increased:

- Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: ~~54.0~~27.6 lb-NO_x/day, ~~9,9657,737~~ lb-NO_x/yr, ~~or 27,848.7~~ lb-CO/day, ~~and 11,182~~ lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320]

Condition 9 on the Permit to Operate was removed as this unit is no longer authorized to burn recovered gas:

- ~~Permittee shall maintain daily records of total combined volume of fuel gas and TEOR gas burned, and a current listing of all thermally enhanced well-vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request. [District Rule 2201]~~

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;

3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permits S-1141-250-26 and '-529-16
- B. Authorities to Construct S-1141-250-25 and '-529-15
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permits S-1141-250-22 and '-529-9

ATTACHMENT A

Proposed Modified Title V Operating Permits
S-1141-250-26 and '-529-16

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1141-250-26

EXPIRATION DATE: 02/29/2016

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

EQUIPMENT DESCRIPTION:

TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS

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PERMIT UNIT REQUIREMENTS

1. {1311} The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensable vapor piping to vapor disposal devices. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 27, and 28 of T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Collected vapors shall be incinerated in District approved incineration devices as listed on this permit, or injected in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall maintain documentation of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum fugitive VOC emissions rate from the TEOR operation shall not exceed 6,969.4 lb/day, calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fraction of total gas stream after initial compression shall not exceed 10% by weight. Permittee shall conduct quarterly gas sampling immediately downstream of the Carr 2 or 3 injection compressors. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling shall only be required annually. Such sampling is deemed representative of all components at and downstream of the initial compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
10. Authorized incineration sources for collected vapors include steam generators S-1141-55, '60, '515, '516, '517, '518, '519. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

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11. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
13. TEOR operation shall include vapor piping from tank vapor control systems listed on permits S-1141-88, '-479, and '-495. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
15. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1141-529-16

EXPIRATION DATE: 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

69.0 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Section SW23 of Township 31S, Range 22E; Section 31 of Township 29S, Range 22E; Sections SW36 and SE35 of Township 29S, Range 21E; and Section 1 of Township 30S, Range 21E; and Section SW6 of Township 30S and Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.0100 lb-PM10/MMBtu or 0.0030 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown, and as provided below, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. During start-up and shutdown, emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.7 lb-CO/day, and 11,182 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with a gas flowmeter that measures the total combined volume of fuel gas and TEOR gas sent to the steam generator. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
9. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the combined gas streams incinerated in this unit. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

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ATTACHMENT B

Authorities to Construct
S-1141-250-25 and '-529-15

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1141-250-25

ISSUANCE DATE: 01/11/2010

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
CA

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS: REMOVE REFERENCE TO INCINERATING TEOR GAS IN STEAM GENERATORS S-1141-44, '-45, '-46, '-52, '-53, '-61, '-526, AND '-528

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
5. All uncondensed VOC emissions collected by vapor collection and control system shall be incinerated in District approved steam generators. [District Rule 4401, 5.1 and 5.2]
6. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2]

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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DAVID WARNER, Director of Permit Services

S-1141-250-25 : Apr 17 2012 3:26PM - RICKARDK : Joint Inspection NOT Required

7. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1]
8. Steam-enhanced crude oil production well vents shall be open and the well vents connected to a VOC collection and control system. Alternatively, steam-enhanced crude oil production well vents shall be closed, except when 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, and the front line production equipment downstream of the wells that carry produced fluids be connected to a VOC collection and control system. [District Rule 4401, 5.5.1]
9. The operator shall be in violation of Rule 4401 if any District inspection or operator inspection, conducted as a requirement of this rule, are found to be leaking in excess of the applicable leak standards in section 5.6.2. [District Rule 4401, 5.6.1]
10. There shall not be an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations 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]
11. For pressure relief devices (PRDs) a major gas leak is greater than 10,000 ppmv and a minor gas leak is from 400 to 10,000 ppmv. For components other than PRDs a major gas leak is greater than 10,000 ppmv and a minor gas leak is from 2,000 to 10,000 ppmv. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak, except seal lubricant, that is not a major liquid leak and drips liquid at a rate of more than three drops per minute. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from a component into a container is not considered a leak provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401]
12. There shall be no components with major liquid leaks or with gas leaks greater than 50,000 ppmv. [District Rule 4401, 5.6.2.2 and 5.6.2.3]
13. There shall not be more minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv than the following: 3 leaks for 1 - 25 wells, 6 leaks for 26 - 50 wells, 8 leaks for 51 - 100 wells, 10 leaks for 101 - 250 wells, 15 leaks for 251 - 500 wells, and 1 leak for each 20 wells (with a minimum of 50 wells test) for more than 500 wells connected to a VOC collection and control system. [District Rule 4401, 5.6.2.4]
14. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401, 5.7.1]
15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.7.2]
16. Except for pipes and unsafe-to-monitor components, all other components shall be inspected pursuant to the requirements of section 6.3.3 at least once every year. [District Rule 4401, 5.8.1]
17. All pipes shall be visually inspected 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 as allowed by Rule 4401 and specified in this permit. [District Rule 4401, 5.8.2]
18. The 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. [District Rule 4401, 5.8.3.1]

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CONDITIONS CONTINUE ON NEXT PAGE

19. 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 as allowed by Rule 4401 and specified in this permit. [District Rule 4401, 5.8.3.2]
20. The 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. The 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. [District Rule 4401, 5.8.4.1]
21. The operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. The operator shall inspect a component, other than PRDs, that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. The operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.8.4.2, 5.8.4.3, 5.8.5]
22. 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]
23. The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.1, 5.9.2]
24. The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. Except for leaking critical components or leaking essential components, if the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4401, 5.9.3, 5.9.4]
25. The operator shall repair minor gas leaks within 14 days, major gas leaks which less than or equal to 50,000 ppmv within 5 days., major gas leaks which are greater than 50,000 ppmv within two days, minor liquid leaks within 3 days, and major liquid leaks within 2 days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4401, 5.9.4, 5.9.5, and 5.9.6]
26. If a leaking component is an essential component or a critical component which cannot be shut down immediately for repairs, and after being minimized still exceeds the applicable leak standard, the operator shall repair or replace the component to eliminate the leak during the next process unit turnaround or no later than one year from the date of original leak detection, which ever is earlier. [District Rule 4401, 5.9.7]
27. 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]

CONDITIONS CONTINUE ON NEXT PAGE

28. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4401, 6.4]
29. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.6]
30. The operator shall maintain copies of training records a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make such available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1.7, 6.1.8]
31. 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. The 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]
32. 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]
33. 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]
34. The operator shall maintain an APCO approved Operator Management Plan (OMP). The OMP shall include, at a minimum, 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; an identification and description of any known hazard that might affect the safety of an inspector; except for pipes, the number of components that are subject to this rule by component type; except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components that are subject to this rule and the reason(s) for such designation; except for pipes, the location of components subject to the rule (components may be grouped together functionally by process unit or facility description); except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the OMP 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 OMP); a detailed schedule of an operator's 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 by an in-house team; a description of the training standards for personnel that inspect and repair components; and a description of the leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and for experienced operators, as necessary. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

35. By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4401, 6.7]
36. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensable vapor piping to vapor disposal devices. [District NSR Rule] Federally Enforceable Through Title V Permit
38. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 27, and 28 of T31S, R22E. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Collected vapors shall be incinerated in District approved incineration devices as listed on this permit, sent to facility S-1114, or injected in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall maintain documentation of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
40. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District NSR Rule] Federally Enforceable Through Title V Permit
41. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District NSR Rule] Federally Enforceable Through Title V Permit
42. Maximum fugitive VOC emissions rate from the TEOR operation shall not exceed 6,969.4 lb/day, calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District NSR Rule] Federally Enforceable Through Title V Permit
43. VOC fraction of total gas stream after initial compression shall not exceed 10% by weight. Permittee shall conduct quarterly gas sampling immediately downstream of the Carr 2 or 3 injection compressors. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling shall only be required annually. Such sampling is deemed representative of all components at and downstream of the initial compressors. [District NSR Rule] Federally Enforceable Through Title V Permit
44. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
45. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rule 1070 & District NSR Rule] Federally Enforceable Through Title V Permit
46. Authorized incineration sources for collected vapors include steam generators S-1141-55, '60, '515, '516, '517, '518, '519. [District NSR Rule] Federally Enforceable Through Title V Permit
47. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
48. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
49. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District Rule 4401 & District NSR Rule] Federally Enforceable Through Title V Permit
50. TEOR operation shall include vapor piping from tank vapor control systems listed on permits S-1141-88, '-479, and '-495. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

51. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070]
Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1141-529-15

ISSUANCE DATE: 01/11/2010

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
CA

SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION: MODIFY BURNER TO INCREASE HEAT INPUT RATING TO 69.0 MMBTU/HR, REPLACE AIR/FUEL MIXER AND/OR UPGRADE FGR SYSTEM (IF NECESSARY), REMOVE VAPOR RECOVERY GAS FIRING, LOWER NOX EMISSIONS LIMIT, AND REVISE SOX AND PM10 EMISSION LIMITS FOR RULE 4320 COMPLIANCE

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOX emission reduction credits for the following quantity of emissions: 1st quarter - 141 lb, 2nd quarter - 141 lb, 3rd quarter - 141 lb, and fourth quarter - 141 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201. [District Rule 2201]
3. ERC Certificate Number S-411-5 (or a certificate split from this certificate) 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]
4. Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 376 lb, 2nd quarter - 376 lb, 3rd quarter - 376 lb, and fourth quarter - 376 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201. [District Rule 2201]

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

COPY

DAVID WARNER, Director of Permit Services

S-1141-529-15 : Apr 17 2012 3:28PM - RICKARDK : Joint Inspection NOT Required

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

5. ERC Certificate Number S-3084-4 (or a certificate split from this certificate) 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]
6. This generator is permitted to operate at the following locations: Section SW23 of Township 31S, Range 22E; Section 31 of Township 29S, Range 22E; Sections SW36 and SE35 of Township 29S, Range 21E; and Section 1 of Township 30S, Range 21E; and Section SW6 of Township 30S and Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3]
8. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
9. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320]
10. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201]
11. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NO_x @ 3% O₂ or 0.0128 lb-NO_x/MMBtu or 25 ppmvd CO @ 3% O₂ or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
12. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]
13. During an initial shakedown period not to exceed 60 calendar days from initial operation of the equipment authorized by this ATC, NO_x emissions shall not exceed 15 ppmvd @ 3% O₂ (or 0.018 lb/MMBtu). The shakedown period shall be concluded upon completion of the initial start-up compliance source test, and will not exceed 60 days. Permittee shall maintain a record of the date of initial operation and shall make such records readily available for District inspection upon request. [District Rules 2201, 4305, 4306, and 4320]
14. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NO_x/day, 7,737 lb-NO_x/yr, 48.7 lb-CO/day, and 11,182 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320]
15. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 2201, 4305, 5.5.6, 4306, 5.3, and 4320]
16. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
17. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
18. Nitrogen oxide (NO_x) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.4.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
21. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, or 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084 or a grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance [District Rules 2520, 9..2 and 4320]
23. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, D4468, D6228, or grab sample analysis by double GC for H₂S and mercaptans performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2, 4306, 6.2.1, and 4320]
25. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted within 60 days of initial startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 6.3.1, 4306, 6.3.1, and 4320]
26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
29. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
31. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

32. If either the NOX or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320]
33. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320]
34. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320]
35. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture content - EPA Method 4, SO_x (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H₂S and mercaptans performed in a laboratory, fuel gas h_hv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306, and 4320]
36. Operator shall provide an annual fuel analysis to the District. [District Rule 4320]
37. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 4306, 5.5.1, and 4320]
38. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320]
39. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO_x and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2, 4305, 6.3.2, 4306, 6.3.2, and 4320]
40. The following conditions must be met for representative unit(s) to be used to test for NO_x and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2, 4305, 6.3.2, 4306, 6.3.2, and 4320]
41. All units in a group for which representative units are source tested for NO_x and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2, 4305, 6.3.2, 4306, 6.3.2, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

42. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2, 4305, 6.3.2, 4306, 6.3.2, and 4320]
43. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 9.3.2, 4305, 6.3.2, 4306, 6.3.2, and 4320]
44. Source testing for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 1081, 2201] Federally Enforceable Through Title V Permit
46. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than two years and shall be made readily available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320]
47. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201, 4406] Federally Enforceable Through Title V Permit
48. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 2520, 9.5.2] Federally Enforceable Through Title V Permit

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-1141-250-26	0	0	0	0	0
S-1141-529-16	0	0	0	0	0
TOTAL	0	0	0	0	0

ATTACHMENT D

Application

San Joaquin Valley Air Pollution Control District

www.valleyair.org

RECEIVED

Permit Application For:

FEB 19 2010

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

SJVAPCD
SOUTH REGION

1. PERMIT TO BE ISSUED TO: Chevron U.S.A. Inc. (CUSA)	
2. MAILING ADDRESS:	
STREET/P.O. BOX: PO Box 1392	
CITY: Bakersfield	STATE: CA 9-DIGIT 93302 ZIP CODE:
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	INSTALLATION DATE:
STREET: Heavy Oil Western Source – Cymric & Midway Sunset Fields CITY: _____	February/March 2010
_____ ¼ SECTION Various TOWNSHIP Various RANGE Various	
4. GENERAL NATURE OF BUSINESS: Oil and gas production	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)	
Implement ATCs Nos. S-1141-529-15 and S-1141-250-25 issued pursuant to project S-1095192.	
6. TYPE OR PRINT NAME OF APPLICANT:	TITLE OF APPLICANT:
William Fall	SJVBU HES Manager
7. SIGNATURE OF APPLICANT:	PHONE: (661) 654-7144
<i>John Gruber for William Fall</i>	DATE: 02/17/2010
	FAX: (661) 654-7004
	EMAIL: john.gruber@chevron.com

For APCD Use Only

NO \$

DATE STAMP	FILING FEE RECEIVED: \$ _____	CHECK#: _____
	DATE PAID: _____	
	PROJECT NO: S-1100723	FACILITY ID: S-1141

Title V - Minor Mod

RECEIVED

FEB 19 2010

SJVAPCD
Southern Region

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 ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: Chevron U.S.A. Inc. (CUSA)	FACILITY ID: S-1141
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. (CUSA)	
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:

William Fall
Signature of Responsible Official

February 17, 2010
Date

William Fall
Name of Responsible Official (please print)

ATCs S-1141-529-15 and -250-25

SJVBU HES Manager
Title of Responsible Official (please print)

ATTACHMENT E

Previous Title V Operating Permits
S-1141250-22 and '-529-9

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1141-250-22

EXPIRATION DATE: 02/29/2016

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

EQUIPMENT DESCRIPTION:

TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING, TO SERVE 2906 THERMALLY ENHANCED WELL VENTS

PERMIT UNIT REQUIREMENTS

1. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensable vapor piping to vapor disposal devices. [District NSR Rule] Federally Enforceable Through Title V Permit
3. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 27, and 28 of T31S, R22E. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Collected vapors shall be incinerated in District approved incineration devices as listed on this permit, or injected in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall maintain documentation of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum fugitive VOC emissions rate from the TEOR operation shall not exceed 6,969.4 lb/day, calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District NSR Rule] Federally Enforceable Through Title V Permit
8. VOC fraction of total gas stream after initial compression shall not exceed 10% by weight. Permittee shall conduct quarterly gas sampling immediately downstream of the Carr 2 or 3 injection compressors. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling shall only be required annually. Such sampling is deemed representative of all components at and downstream of the initial compressors. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rule 1070 & District NSR Rule] Federally Enforceable Through Title V Permit
10. Authorized incineration sources for collected vapors include steam generators S-1141-44, '45, '46, '52, '53, '55, '60, '61, '391, '392, '515, '516, '517, '518, '519, '526, '528. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
13. TEOR operation shall include vapor piping from tank vapor control systems listed on permits S-1141-88, '-479, and '-495. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
15. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1141-529-9

EXPIRATION DATE: 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/CASING GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Section SW23 of Township 31S, Range 22E; Section 31 of Township 29S, Range 22E; Sections SW36 and SE35 of Township 29S, Range 21E; and Section 1 of Township 30S, Range 21E; and Section SW6 of Township 30S and Range 22E. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Emissions from the steam generator shall not exceed any of the following limits: 0.035 lb-SO_x/MMBtu, 0.0100 lb-PM₁₀/MMBtu, or 0.0030 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Except during start-up and shutdown, and as provided below, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-NO_x/MMBtu or 25 ppmvd CO @ 3% O₂ or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
4. During start-up and shutdown, emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NO_x/day, 9,965 lb-NO_x/yr or 27.8 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with a gas flowmeter that measures the total combined volume of fuel gas and TEOR gas sent to the steam generator. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
8. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the combined gas streams incinerated in this unit. [District Rules 2201, 4406] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of total combined volume of fuel gas and TEOR gas burned, and a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request.. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

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