



JUL 29 2010

Mr. William Fall
Chevron USA
P.O. Box 1392
Bakersfield, CA 93302

Re: Notice of Final Decision - ATC / Certificate of Conformity
Facility # S-1131
Project # S-1093873

Dear Mr. Fall:

The Air Pollution Control Officer has issued Authority to Construct permits to Chevron USA for its heavy oil operation at their Heavy Oil Central stationary source, California. The project is to limit the NOx emissions of forty-four steam generators for District Rule 4320 compliance.

Enclosed are copies of the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits with Certificate of Conformity was published on 6/11/10. The District's analysis of the proposal was also sent to US EPA Region IX on 6/11/10. All comments received have been addressed by the District. A summary of the comments and the District's response to each comment is attached.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 30 days.

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

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region

4800 Enterprise Way
Modesto, CA 95356-8718

Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)

1990 E. Gettysburg Avenue
Fresno, CA 93726-0244

Tel: (559) 230-6000 FAX: (559) 230-6061


Southern Region

34946 Flyover Court
Bakersfield, CA 93308-9725

Tel: 661-392-5500 FAX: 661-392-5585

Mr. William Fall
Page 2

Sincerely,


David Warner
Director of Permit Services

Enclosures

c: Dolores Gough, Permit Services



JUL 29 2010

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

**Re: Notice of Final Decision - ATC / Certificate of Conformity
Facility # S-1131
Project # S-1093873**

Dear Mr. Rios:

The Air Pollution Control Officer has issued Authority to Construct permits to Chevron USA for its heavy oil operation at their Heavy Oil Central stationary source, California. The project is to limit the NOx emissions of forty-four steam generators for District Rule 4320 compliance.

Enclosed are copies of the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits with Certificate of Conformity was published on 6/11/10. The District's analysis of the proposal was also sent to CARB on 6/11/10. All comments received have been addressed by the District. A summary of the comments and the District's response to each comment is attached.

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

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures
c: Dolores Gough, Permit Services

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JUL 29 2010

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

**Re: Notice of Final Decision - ATC / Certificate of Conformity
Facility # S-1131
Project # S-1093873**

Dear Mr. Tollstrup:

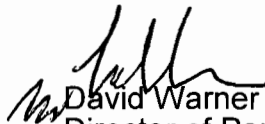
The Air Pollution Control Officer has issued Authority to Construct permits to Chevron USA for its heavy oil operation at their Heavy Oil Central stationary source, California. The project is to limit the NOx emissions of forty-four steam generators for District Rule 4320 compliance.

Enclosed are copies of the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits with Certificate of Conformity was published on 6/11/10. The District's analysis of the proposal was also sent to US EPA Region IX on 6/11/10. All comments received have been addressed by the District. A summary of the comments and the District's response to each comment is attached.

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

Sincerely,



David Warner
Director of Permit Services

Enclosures

c: Dolores Gough, Permit Services

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Executive Director/Air Pollution Control Officer

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Comments received from Chevron during COC and public noticing period:

Comment #1: The SOx limits for ATC S-1131-976 and '-1002 for Projects S-1093873 and 1094657 should be 0.005 lb/MMBtu instead of 0.00285 lb/MMBtu. This is the existing limit and no increase is proposed.

District Response: Corrected the appropriate ATCs and sent an email to EPA during noticing period that the ATCs will be revised per Chevron's comments.

Bakersfield Californian

**NOTICE OF FINAL DECISION
FOR THE ISSUANCE OF AUTHORITY
TO CONSTRUCT PERMITS**

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Authority to Construct permits to Chevron USA for its heavy oil operation at their Heavy Oil Central stationary source, California. The project is to limit the NOx emissions of forty-four steam generators for District Rule 4320 compliance.

Comments received following the District's preliminary decision on this project have been addressed by the District.

The application review for Project #S-1093873, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. **SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-62-30

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-38; DIS# 20630-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MODEL GLE LOW-NOX BURNER, AND NORTH AMERICAN OPTIMIZER: LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.007 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-62-30 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period 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 and 50 ppmvd CO @ 3% O₂ or 0.037 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-62-31. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-63-25

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG#60-39, DIS#20631-79) WITH NORTH AMERICAN GLE LOW-NOX BURNER, FLUE GAS RECIRCULATION (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-63-25 : Jul 21 2010 10:10AM -- GOUGHID : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period 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 and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-63-26. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-64-25

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-40; DIS# 20632-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN GLE LOW-NOX BURNER AND NORTH AMERICAN OPTIMIZER: LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-64-25 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period 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 and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-64-26. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-65-26

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-41; DIS# 20633-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN, MODEL GLE MAGNA FLAME LOW NOX, BURNER AND NORTH AMERICAN OPTIMIZER (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-65-26 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 43.5 lb-CO/day, and 15,858 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3%O₂ or 0.0182 NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-65-27. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-66-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-42; DIS# 20634-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN, MODEL GLE MAGNA FLAME LOW NOX, BURNER AND NORTH AMERICAN OPTIMIZER. (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-66-24 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 15,858 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3%O₂ or 0.0182 NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-66-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-67-25

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR (HSG# 60-43; DIS# 20635-79) WITH FLUE GAS RECIRCULATION AND A NORTH AMERICAN GLE LOW-NOX BURNER (SAN JOAQUIN LOWER); LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-67-25 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 6,023 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3%O2 or 0.0182 NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-67-26. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-68-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR (HSG# 60-44; DIS# 20636-79) WITH FLUE GAS RECIRCULATION AND A NORTH AMERICAN GLE LOW-NOX BURNER (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-68-24 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3%O₂ or 0.0182 NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-68-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-69-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-45; DIS# 20637-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN, MODEL GLE MAGNA FLAME LOW NOX, BURNER AND NORTH AMERICAN OPTIMIZER. (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-69-24 : Jul 21 2010 10:10AM - GOUJHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 15,858 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3%O₂ or 0.0182 and 50 ppmvd CO @ 3% O₂ or 0.037 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-69-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-70-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-46; DIS# 20638-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

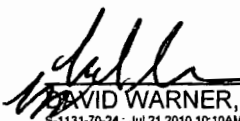
CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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


DAVID WARNER, Director of Permit Services

S-1131-70-24 : Jul 21 2010 10:10AM -- GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3%O₂ or 0.0182 NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-70-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-73-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-49; DIS# 20641-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (SAN JOAQUIN LOWER): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-73-24 : Jul 21 2010 10:10AM - GOUGHD : Joint Inspection NOT Required

6. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 20,258 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When pipeline quality natural gas is used to fuel this unit, 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 quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain daily records of volume of fuel gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-70-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-77-25

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE29 **TOWNSHIP:** 28S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-67; DIS# 20611-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN GLE MAGNA FLAME LOW-NOX BURNER. (CANFIELD LEASE); LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-77-25 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown that exceeds two hours. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rule 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rule]
27. Compliance source testing after switching fuel type is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320, 6.2.1]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D1826 or D1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rule 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after ATC S-1131-77-26. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-78-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE29 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-69; DIS# 20610-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CANFIELD LEASE): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-78-24 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320]
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after ATC S-1131-78-26. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-82-27

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE05 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-88; DIS# 20643-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN GLE MAGNA FLAME LOW-NOX BURNER - SJ LOWER: LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and vapor recovery gas from the vapor control system listed on permit unit PTO S-1131-598 that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf unless SOx is reduced by 95% or to an outlet concentration not exceeding 9 ppmv via scrubbing. [District Rules 2201, 4406, and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-82-27 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu or 1.026 lb-SO_x/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320]
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period 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, and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rule 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier [District Rules 2520 and 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCO performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after S-1131-82-28. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-94-28

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 29 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STRUTHERS STEAM GENERATOR (HSG# 70-08; DIS# 20627-81) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER (CANFIELD LEASE): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

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6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320]
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type [District Rule]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after S-1131-94-29. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-95-24

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS/GAS FIRED STRUTHERS STEAM GENERATOR (HSG# 70-31; DIS# 20642-79) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM AND NORTH AMERICAN OPTIMIZER - SJ LOWER: LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1131-598. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf unless SOx is reduced by 95% or to an outlet concentration not exceeding 9 ppmv @ 3% O2 via scrubbing. [District Rules 2201, 4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-95-24 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu or 1.026 lb-SO_x/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 43.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NO_x/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320]
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period 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, 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier [District Rules 2520 and 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after ATC S-1131-95-25. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-98-30

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (HSG# 70-44; DIS# 20608-82) WITH A NORTH AMERICAN MODEL #GLE-4231 LOW NOX BURNER AND FLUE GAS RECIRCULATION: LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1131-598. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf unless SOx is reduced by 95% or to an outlet concentration not exceeding 9 ppmv @3% O2 via scrubbing. [District Rules 2201,4406, and 4320] 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.

Sayed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-1131-98-30 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu or 1.026 lb-SOx/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 43.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320]
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the type of fuel combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after ATC S-1131-98-31. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-99-31

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE05 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (HSG# 70-45; DIS# 20609-82) WITH A NORTH AMERICAN MODEL #GLE-4231 LOW NOX BURNER AND FLUE GAS RECIRCULATION: LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1131-598. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf unless SOx is reduced by 95% or to an outlet concentration not exceeding 9 ppmv @ 3% O2 via scrubbing. [District Rules 2201, 4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-99-31: Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; 1.026 lb-SO_x/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu [District Rule 2201 and 4320]
9. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period 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 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu, [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
29. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

30. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NOx and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
31. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM10 - EPA Method 5, SOx (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCO performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. Records shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

42. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. This ATC shall be implemented concurrently or after ATC S-1131-99-32. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-858-14

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE29 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED NATIONAL STEAM GENERATOR (HSG# 50-43; DIS# 20628-79) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MODEL GLE MAGNA FLAME LOW NOX BURNER, AND NORTH AMERICAN OPTIMIZER - (CANFIELD LEASE): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE


CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1131-598. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-858-14: Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period 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, 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
31. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCO performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

43. This ATC shall be implemented concurrently or after ATC S-1131-858-15 . [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-859-15

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE05 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (HSG# 50-51; DIS# 19161- 75) WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME, LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM AND NORTH AMERICAN OPTIMIZER (SAN JOAQUIN LOWER); LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1131-598. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf unless SOx is reduced by 95% or to an outlet concentration not exceeding 9 ppmv @ 3% O2 via scrubbing. [District Rules 2201,4406, and 4320] 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


DAVID WARNER, Director of Permit Services

S-1131-859-15 : Jul 21 2010 10:11AM - GOUGHID : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; 1.026 lb-SOx/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201 and 4320]
11. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 43.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
15. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
16. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 39 ppmvd CO @ 3% O2 or 0.029 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
21. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
22. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
23. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
24. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 39 ppmvd CO @ 3% O₂ or 0.029 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
25. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
26. 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 Rule 4320] Federally Enforceable Through Title V Permit
27. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 for ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. Records shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. This ATC shall be implemented concurrently or after ATC S-1131-859-16. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-877-16

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #46 WITH FGR, NORTH AMERICAN MODEL GLE 4231 BURNER AND O2 CONTROLLER (CENTRAL PLANT): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-877-16 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.0768 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 31.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 28 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 28 ppmvd CO @ 3% O₂ or 0.021 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration [District Rules 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Formerly S-1143-3.
43. This ATC shall be implemented concurrently or after ATC S-1131-877-17. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-879-21

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN GLE LOW-NOX BURNER WITH FGR AND AN O2 CONTROLLER (#70, CENTRAL PLANT): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90 , S-1131-885, S-1131-903, S-1131-909 and S-1131-1040 . The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-879-21 : Jul 21 2010 10:11AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.013 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1143-5.
41. This ATC shall be implemented concurrently or after ATC S-1131-879-22. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-880-15

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR #140 WITH A NORTH AMERICAN MODEL #GLE-4231 LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CENTRAL PLANT): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-880-15 : Jul 21 2010 10:11AM -- GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.030 lb-CO/MMBtu. [District Rules 2201 and 4320]
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.030 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
9. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
10. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 45.0 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period 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 41 ppmvd CO @ 3% O₂ or 0.03 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
21. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
24. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
25. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
26. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.03 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.03 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
27. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

29. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
31. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
32. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
33. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
35. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. Formerly S-1143-6.
40. This ATC shall be implemented concurrently or after ATC S-1131-880-16. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-881-16

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN GLE LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER (CENTRAL PLANT): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-881-16 : Jul 21 2010 10:11AM - GOUHGD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 7,665 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NO_x @ 3% O₂ or 0.014 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
10. The applicable NO_x and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
11. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet and at least 80% methane by volume. [District Rule 4320]
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period 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 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit.
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
21. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
24. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
25. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
26. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
27. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

29. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
31. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
32. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
33. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
35. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. Formerly S-1143-6.
39. This ATC shall be implemented concurrently or after ATC S-1131-881-17. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-883-16

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 4 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR (#143) WITH FGR AND O2 CONTROLLER (CENTRAL PLANT): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-883-16 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.013 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 41 ppmvd CO @ 3% O2 or 0.03 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 41 ppmvd CO @ 3% O2 or 0.03 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 45.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 41 ppmvd CO @ 3% O2 or 0.03 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.03 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 41 ppmvd CO @ 3% O₂ or 0.03 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCO performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1143-9.
41. This ATC shall be implemented concurrently or after ATC S-1131-883-17. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-884-18

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MM BTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #144 EQUIPPED WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION. (CENTRAL PLANT): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-884-18 : Jul 21 2010 10:12AM - GOUGH : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.013 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1143-10.
41. This ATC shall be implemented concurrently or after ATC S-1131-884-19. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-908-19

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 4 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR (#71) WITH A NORTH AMERICAN GLE MAGNA FLAME LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM (FGR), AND O2 CONTROLLER: LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-908-19 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.013 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to > 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1143-90.
41. This ATC shall be implemented concurrently or after ATC S-1131-908-20. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-912-8

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE04 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A NORTH AMERICAN GLE MAGNA FLAME LOW-NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM (RASMUSSEN LEASE):
LIMIT NOX TO 9 PPM @ 3% O2 FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and gas that has a combined fuel sulfur content not exceeding 1.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.014 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-912-8 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

7. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period 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 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The fuel combusted in this unit shall be tested quarterly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which quarterly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2201 and 4320]
18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

31. Permittee shall maintain daily records of fuel gas, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. Records shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
34. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. This ATC shall be implemented concurrently or after ATC S-1131-912-9. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-941-14

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 25 TOWNSHIP: 28S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 27.5 MMBTU/HR THERMOTICS VAPOR CONTROL/NATURAL GAS-FIRED STEAM GENERATOR #29 WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION AND AMETEK THERMOX O2 CONTROLLER (LEASE FEE A) (GROUP II): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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.

Sayed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-1131-941-14 : Jul 21 2010 10:12AM -- GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.093 lb-PM10/MMBtu; or 0.007 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 3,373 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.8 lb-CO/day, and 6,263 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted shall be tested quarterly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which quarterly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SOx at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM10 - EPA Method 5, SOx (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly permit number S-1133-1-15 and S-1109-671-0.
41. This ATC shall be implemented concurrently or after ATC S-1131-941-15. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-943-15

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 25 TOWNSHIP: 28S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR O-PAR GAS-FIRED STEAM GENERATOR #31, WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER AND AMETEK THERMOX O2 CONTROLLER - LEASE FEE A: LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. This steam generator shall operate only as a replacement standby unit for units S-1131-941. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
5. Annual fuel use shall not exceed 90 billion Btu. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-943-15 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

7. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following limits: 0.075 lb-PM10/MMBtu; or 0.007 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
10. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
11. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
12. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
13. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 1,260 lb-NOx/year, 0.084 lb-CO/MMBtu, 49.5 lb-CO/day, and 2,340 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
16. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
17. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel combusted in this unit shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annual testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
20. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
22. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
23. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
24. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
25. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
26. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
27. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
28. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
29. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

30. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
32. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
34. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCO performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
35. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
36. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
38. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Formerly permit number S-1133-21-11 and S-1109-682-0.
43. This ATC shall be implemented concurrently or after ATC S-1131-943-16. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-966-14

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: 30 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF EMISSIONS UNIT 27.5 MMBTU/HR THERMOTICS VAPOR CONTROL/NATURAL GAS-FIRED STEAM GENERATOR #24 WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION AMETEK THERMOX O2 CONTROLLER (FEE C LEASE): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-966-14 : Jul 21 2010 10:12AM -- GOUGHID : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.070 lb-PM10/MMBtu or 0.007 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 3,373 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.8lb-CO/day, and 7,950 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 45 ppmvd CO @ 3% O2 or 0.033 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Each fuel source shall be tested quarterly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which quarterly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 45 ppmvd CO @ 3% O₂ or 0.033 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

CONDITIONS CONTINUE ON NEXT PAGE

30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. Formerly permit number S-1133-3-14 and S-1109-673-0.
42. This ATC shall be implemented concurrently or after ATC S-1131-966-15. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-976-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE3 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 23 MMBTU/HR STRUTHERS GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION AND OXYGEN CONTROLLER/ANALYZER (#13, DIS # 27537-66): LIMIT NOX TO 9 PPM FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and gas that has a combined fuel sulfur content not exceeding 2.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.009 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-976-11 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

7. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 19.9 lb-NO_x/day, 2,216 lb-NO_x/year, 0.084 lb-CO/MMBtu or 1.1 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
11. During the initial "shakedown" period 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 2.7 ppmvd CO @ 3% O₂ or 0.002 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The fuel combusted in this unit shall be tested quarterly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which quarterly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
14. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
16. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2201 and 4320]
18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
21. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. [District Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
25. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
26. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

31. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. Records shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
34. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. Formerly S-1109-2.
36. This ATC shall be implemented concurrently or after ATC S-1131-976-12. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-987-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE19 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR THERMOTICS GAS/CASING GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER AND FLUE GAS RECIRCULATION (FGR) SYSTEM (R-3, DIS# 27474-81): LIMIT NOX TO 9 PPM (0,011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-885, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-987-11: Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.044 lb-PM10/MMBtu or 0.005 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 31 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 31 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100 standard cubic feet) and at least 80% methane by volume. [District Rule 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 34.5 lb-CO/day and 12,593 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu, or 31 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel's sulfur content or conduct a source test for SO_x at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320] Federally Enforceable Through Title V Permit
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur), ASTM D1072, D3246 or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC-FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320] Federally Enforceable Through Title V Permit
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1143-90.
41. This ATC shall be implemented concurrently or after ATC S-1131-987-9. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-992-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NE29 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR THERMOTICS GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER AND FLUE GAS RECIRCULATION (PRICEWELL, #P-9, DIS# 27472-81): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3 % O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on PUC-quality natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]

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

DAVID WARNER, Director of Permit Services

S-1131-992-11 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.029 lb-PM10/MMBtu or 0.005 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 30.7 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 30.7 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 34.5 lb-CO/day, and 12,593 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu and 31 ppmvd CO @ 3% O2 or 0.023 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 31 ppmvd CO @ 3% O₂ or 0.023 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1109-97.
41. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

42. This ATC shall be implemented concurrently or after ATC S-113-992-12. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-993-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NE29 **TOWNSHIP:** 28S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (PRICEWELL, P-3, DIS# 28773-85): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

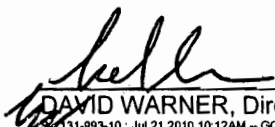
CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rules 2201 and 4320]
4. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H₂S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]

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



DAVID WARNER, Director of Permit Services

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6. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following limits: 0.0063 lb-PM10/MMBtu or 0.0042 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 18.7 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 18.7 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
10. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.0 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
15. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
21. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
22. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
23. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4320] Federally Enforceable Through Title V Permit
25. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
26. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
27. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
28. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

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29. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
38. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

42. Formerly S-1109-104.

43. This ATC shall be implemented concurrently or after ATC S-113-993-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-994-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE09 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE LOW-NOX BURNER, OXYGEN CONTROLLER/ANALYZER AND FLUE GAS RECIRCULATION (MCMANUS, PL-8, DIS# 4322-78): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 PPM) FOR RULE 4320 COMPLIANCE

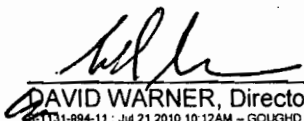
CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-994-11 : Jul 21 2010 10:12AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.0045 lb-PM10/MMBtu or 0.005 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 30.0 lb-CO/day, and 10,950 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 Lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel h_hv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1109-108.
41. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

42. This ATC shall be implemented concurrently or after ATC S-113-994-12. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-997-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE13 TOWNSHIP: 28S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR THERMOTICS NATURAL GAS/CASING GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE MAGNA-FLAME BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN OXYGEN CONTROLLER/ANALYZER (ANGUS 2, DIS# 4509-81): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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


DAVID WARNER, Director of Permit Services
S-1131-997-11 : Jul 21 2010 10:12AM - GOUGHID : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.0045 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 30.0 lb-CO/day, and 10,950 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 4320]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-118.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-997-12. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-998-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SW34 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (HOPCO, H-2, DIS# 39454-87): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

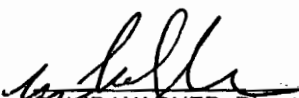
CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-998-10; Jul 21 2010 10:13AM - GOUGHID : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.007 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.0 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-121.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-998-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-999-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE19 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (RAMBLER, R-7, DIS# 12466-82): LIMIT NOX TO 9 PPM (0.011 LB/MMBTU) OR TO 12 PPM (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932, '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-999-10 : Jul 21 2010 10:13AM - GOUHGD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.007 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.0 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
26. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320]
27. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
28. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

29. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 25 ppmvd CO @ 3% O₂ or 0.0185 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 25 ppmvd CO @ 3% O₂ or 0.0185 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]
30. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
32. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
34. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
35. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
36. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
38. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Formerly S-1109-127.
43. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
44. This ATC shall be implemented concurrently or after ATC S-113-999-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1000-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE19 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (RAMBLER, R-8, DIS# 12468-82): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE


CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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


DAVID WARNER, Director of Permit Services

SJ-1131-1000-10 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.0065 lb-PM10/MMBtu or 0.004 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.0 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
10. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
11. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
29. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-128.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-1000-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1001-11

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (CHINA 3, DIS#12467-82): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

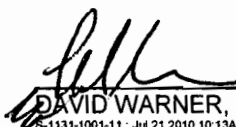
CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-1040. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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


DAVID WARNER, Director of Permit Services

S-1131-1001-11 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.006 lb-PM10/MMBtu or 0.0041 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.0 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas and the outlet H2S concentration from Sulfa Check unit of on S-1131-1040 at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
30. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO₂ at least once 12 months. [District Rule 4320, 5.7.6]
31. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
32. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
36. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Formerly S-1109-129.
41. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

42. This ATC shall be implemented concurrently or after ATC S-113-1001-12. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1002-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NE29 **TOWNSHIP:** 28S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER AND FLUE GAS RECIRCULATION SYSTEM: LIMIT NOX TO 9 PPM @ 3% O2 FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 2.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeter that measures the fuel gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.006 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-1002-10 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

7. Emissions shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 3 ppmvd CO @ 3% O₂ or 0.002 lb-CO/MMBtu except during start-up or shutdown or shakedown period. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NO_x/MMBtu, 54.0 lb-NO_x/day, 6,023 lb-NO_x/year, 0.084 lb-CO/MMBtu, 3.0 lb-CO/day, and 4,052 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
11. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
12. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NO_x @ 3% O₂ or 0.0182 lb-CO/MMBtu and 3 ppmvd CO @ 3% O₂ or 0.002 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
14. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
15. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
16. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
17. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

19. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
20. 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 Rule 4320] Federally Enforceable Through Title V Permit
21. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
22. A source test to demonstrate compliance with NO_x, SO_x, and CO emission limits shall be performed within 60 days of startup of this unit. An analysis of the fuel sulfur content shall be submitted for compliance with the SO_x requirement in lieu of the source test for SO_x. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
25. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
26. Source testing to measure NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2 and 4320, 6.3.1] Federally Enforceable Through Title V Permit
27. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
28. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
29. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
32. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
33. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
36. Formerly S-1109-135-14
37. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
38. This ATC shall be implemented concurrently or after ATC S-1131-1002-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1003-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SW34 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (HOPCO, H-3, DIS# 39455-87): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE


CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932, '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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


DAVID WARNER, Director of Permit Services
S-1131-1003-10 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.007 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.4 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (> 50% PUC quality gas or greater than or equal to 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
29. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-136.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-1003-11. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1004-10

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NE29 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, OXYGEN CONTROLLER/ANALYZER, FLUE GAS RECIRCULATION (PRICEWELL, H-4): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 PPM) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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

DAVID WARNER, Director of Permit Services

S-1131-1004-10 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.007 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 21.4 lb-CO/day, and 7,665 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 19 ppmvd CO @ 3% O2 or 0.014 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 19 ppmvd CO @ 3% O₂ or 0.014 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
29. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCD, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-137.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-1004-11. [District Rule 2201]

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AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1016-12

ISSUANCE DATE: 07/19/2010

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

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE13 **TOWNSHIP:** 28S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 62.5 MMBTU/HR C.E. NATCO GAS/CASING GAS-FIRED STEAM GENERATOR NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER AND FLUE GAS RECIRCULATION (ANGUS): LIMIT NOX TO 9 PPM @ 3% O2 (0.011 LB/MMBTU) OR TO 12 PPM @ 3% O2 (0.014 LB/MMBTU) FOR RULE 4320 COMPLIANCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The operator shall fire the unit only on natural gas and gas from the following permit units: PTO S-1131-598, '-885, '-932; '-958, '-996, '-1007, and '-1008. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
4. PUC-quality natural gas is any gaseous fuel where the sulfur content is no more than 0.25 gr H2S/100 scf, no more than 5.0 gr S/100 scf, and at least 80% methane by volume. [District Rule 4320]
5. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] 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



DAVID WARNER, Director of Permit Services

S-1131-1016-12 : Jul 21 2010 10:13AM - GOUGHD : Joint Inspection NOT Required

6. Emission rates shall not exceed any of the following limits: 0.045 lb-PM10/MMBtu or 0.006 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
8. Except during startup, shutdown and the shakedown period, emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rules 2201 and 4320]
9. The applicable NOx and CO emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or greater than or equal to 50% by volume PUC quality gas). Permittee shall maintain supporting records that determine the type of fuel combusted. [District Rules 2201 and 4320]
10. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 7,665 lb-NOx/year, 0.084 lb-CO/MMBtu, 30 lb-CO/day, and 10,950 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rule 4320, 5.3]
13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201 and 4320]
14. During the initial "shakedown" period emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-CO/MMBtu and 27 ppmvd CO @ 3% O2 or 0.02 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The shakedown period shall begin after initial operation of this unit after implementation of the modification authorized by this ATC. The shakedown period shall be concluded within 60 days of initial operation and prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and all monitoring records as required by this permit starting on the date of initial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When incinerating vapor recovery gas in this unit, permittee shall measure and record the sulfur content and higher heating value of the vapor recovery gas at least monthly using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
17. When pipeline quality natural gas is used to fuel this unit, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6]
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320, 5.7.6]
20. 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. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2 and 4320]
22. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule 4320] Federally Enforceable Through Title V Permit
24. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 2201 and 1081] Federally Enforceable Through Title V Permit
25. A source test to demonstrate compliance with NO_x and CO emission limits shall be performed within 60 days of startup of this unit. The NO_x limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted (greater than or equal to 50% PUC quality or < 50% PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO_x and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201 and 4320]
26. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type (greater than or equal to 50% PUC quality gas or < 50% PUC quality gas). After an initial compliance demonstration with the NO_x and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201 and 4320]
27. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six(36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu and 27 ppmvd CO @ 3% O₂ or 0.02 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

28. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. Permittee shall submit an analysis showing the fuel sulfur content (as H₂S) by either EPA Method 11, 15, or ASTM D6228; total fuel sulfur content by either ASTM D1072, D3246, D6228 or double GC with mercaptans; or conduct a source test for SO_x at least once 12 months. [District Rule 4320, 5.7.6]
32. 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 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
33. 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 ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM₁₀ - EPA Method 5, SO_x (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H₂S) - EPA Method 11 or 15 or ASTM D6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H₂S and mercaptans or GC FPTD/TCO, performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 (as methane) in conjunction with ASTM D 3588. [District Rules 1081, 2201 and 4320]
34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4320] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520 and 4320] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NO_x and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, and 4320] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Formerly S-1109-221-15.
42. This Authority to Construct shall be implemented according to the date proposed in the District approved Rule 4320 Emission Control Plan. [District Rule 2201 and 4320]
43. This ATC shall be implemented concurrently or after ATC S-113-1016-13. [District Rule 2201]