



NOV 28 2016

Mr. David Campbell
Tricor Refining, LLC
1134 Manor Street
Bakersfield, CA, 93308

**Re: Final - Authority to Construct / Certificate of Conformity (Significant Mod)
District Facility # S-44
Project # S-1161936**

Dear Mr. Campbell:

The Air Pollution Control Officer has issued Authorities to Construct (ATC #S-44-1-17, '-2-224, '-3-18, '-4-16, '-5-12, '-6-12, and '-13-19) with Certificates of Conformity to Tricor Refining, LLC at 1134 Manor Street, Bakersfield. The Authorities to Construct authorize removing conditions that limit concurrent operation of equipment with Oildale Energy's gas turbine (S-73-2). Enclosed are the Authorities to Construct 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 permit was published on October 4, 2016. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on September 28, 2016. No comments were received following the District's preliminary decision on this project.

Prior to operating with the modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms have been enclosed for your use. These forms may also be found on the District's website at www.valleyair.org.

Mr. David Campbell
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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,



Arnaud Marjollet
Director of Permit Services

Enclosures

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



Facility # S-44
TRICOR REFINING, LLC
PO BOX 5877
BAKERSFIELD, CA 93308

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Modify Your Title V Permit.** Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at <http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm>.
3. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
4. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
5. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
6. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
7. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at http://www.valleyair.org/busind/comply/compliance_forms.htm.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

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



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-1-19

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF DORMANT 61 MMBTU/HR CRUDE FRACTIONATION PLANT INCLUDING LIQUID RING STAGED VACUUM PUMP WITH SEPARATOR, FLAME ARRESTOR, EMERGENCY VENT STACK, GAS/LIQUID SEPARATOR, THREE VACUUM VESSELS, ONE ATMOSPHERIC VESSEL, AND FOUR HEATERS: REMOVE SLC SHARED WITH FACILITY 73

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. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The fuel supply lines shall be physically disconnected from Heaters A, B, C, and D. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Heaters A, B, C, and D shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-44-1-19 Nov 21 2016 11:02AM - DAVIDSOS Joint Inspection NOT Required

6. Crude fractionation plant shall include Corona Cel liquid ring staged vacuum pump with separator, flame arrestor, emergency vent stack, gas/liquid separator, and three vacuum vessels and one atmospheric vessel. [District NSR Rule] Federally Enforceable Through Title V Permit
7. There shall be no detectable volatile organic compound (VOC) emissions from valves and flanges or from pressure relief valves during normal operation. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Crude oil throughput for S-44-1 and S-44-4 combined shall not exceed 12,800 barrels per day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Heater A shall operate as a replacement standby unit and shall not exceed a total heat input of 90 billion Btu/yr. [District Rule 4305] Federally Enforceable Through Title V Permit
10. Heater A shall be tuned at least once each calendar year in which it operates by a qualified technician in accordance with Rule 4304. [District Rule 4305] Federally Enforceable Through Title V Permit
11. Refinery produced fuel gas shall be treated in H₂S scrubber listed in S-44-13. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Refinery produced fuel gas shall be burned in C.B. boiler S-44-13 and/or solvent plant heater S-44-2. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Gas-fired emission rates from heaters shall not exceed any of the following: NO_x - 0.036 lb/MMBtu, CO - 0.0840, VOC - 0.0055, PM₁₀ - 0.0076, or SO_x - 0.0143 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Oil-fired emission rates from heaters shall not exceed any of the following: NO_x - 0.052 lb/MMBtu, CO - 0.0365, VOC - 0.0015, PM₁₀ - 0.0241, or SO_x - 0.0518 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
16. The stack concentration of NO_x (as NO₂), CO, and O₂, from heaters A, B, C, and D, shall be measured at least on a monthly basis, when operating, using District approved portable analyzers. [District Rule 4305] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided for heaters A, B, C, and D in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to measure NO_x and CO emissions shall be conducted for heaters A, B, C, and D not less than once every 12 months, except as provided below. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
19. Source testing to measure NO_x and CO emissions shall be conducted for heaters A, B, C, and D, not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
20. If permittee fails any compliance demonstration for NO_x or CO emission limits when testing not less than once every 36 months, compliance with NO_x and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
21. Source testing shall be performed to demonstrate compliance with NO_x and CO emission limits within 60 days of introducing fuel for which the unit has not been source tested on in the previous 12 months. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
22. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NO_x and CO source testing requirement. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

6. Crude fractionation plant shall include Corona Cel liquid ring staged vacuum pump with separator, flame arrestor, emergency vent stack, gas/liquid separator, and three vacuum vessels and one atmospheric vessel. [District NSR Rule] Federally Enforceable Through Title V Permit
7. There shall be no detectable volatile organic compound (VOC) emissions from valves and flanges or from pressure relief valves during normal operation. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Crude oil throughput for S-44-1 and S-44-4 combined shall not exceed 12,800 barrels per day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Heater A shall operate as a replacement standby unit and shall not exceed a total heat input of 90 billion Btu/yr. [District Rule 4305] Federally Enforceable Through Title V Permit
10. Heater A shall be tuned at least once each calendar year in which it operates by a qualified technician in accordance with Rule 4304. [District Rule 4305] Federally Enforceable Through Title V Permit
11. Refinery produced fuel gas shall be treated in H₂S scrubber listed in S-44-13. [District NSR Rule] Federally Enforceable Through Title V Permit
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16. The stack concentration of NO_x (as NO₂), CO, and O₂, from heaters A, B, C, and D, shall be measured at least on a monthly basis, when operating, using District approved portable analyzers. [District Rule 4305] Federally Enforceable Through Title V Permit
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19. Source testing to measure NO_x and CO emissions shall be conducted for heaters A, B, C, and D, not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
20. If permittee fails any compliance demonstration for NO_x or CO emission limits when testing not less than once every 36 months, compliance with NO_x and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
21. Source testing shall be performed to demonstrate compliance with NO_x and CO emission limits within 60 days of introducing fuel for which the unit has not been source tested on in the previous 12 months. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
22. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NO_x and CO source testing requirement. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
26. 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, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351] Federally Enforceable Through Title V Permit
27. If the NO_x or CO concentrations for heaters A, B, C or D, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall notify the District and take corrective action as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 4305] Federally Enforceable Through Title V Permit
28. The permittee shall maintain records of the date and time of NO_x, CO, and O₂ measurements, the measured NO₂ and CO concentrations corrected to 3% O₂, and the O₂ concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2520, 9.4.2, and 4305] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Permittee shall maintain accurate records of fuel type, heating value of fuel, fuel consumption, daily crude oil throughput, annual operating hours & heat input per heater, annual emissions for the heaters, and dates of tuning. [District NSR Rule] Federally Enforceable Through Title V Permit
31. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. The portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 19,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
35. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
36. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
37. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

38. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
39. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or EPA Method 6; or CARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
41. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
42. If the unit is fired on noncertified liquid fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
43. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
44. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or 3.0% by weight for residual oil (including crude or topped crude); or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801] Federally Enforceable Through Title V Permit
45. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
46. Nitrogen oxide (NO_x) emissions from each heater shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
47. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO_x and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
48. The following conditions must be met for representative unit(s) to be used to test for NO_x and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

49. All units in a group for which representative units are source for NO_x and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
50. All units in a group for which representative units are source tested to for NO_x and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
51. The number of representative units source tested for NO_x and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-2-26

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 06 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF SOLVENT EXTRACTION PLANT INCLUDING AIR STRIPPER, TWO ROTATING DISC COLUMNS, AND 40 MMBTU/HR SOLVENT PLANT VERTICAL CYLINDRICAL TYPE HOT OIL HEATER WITH A ZEECO MODEL GLSF-16 LOW NOX BURNER: REMOVE SLC SHARED WITH FACILITY 73

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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Solvent plant vertical cylindrical-type heater fuel gas use (not including pilot gas and waste gas) shall not exceed 36,800 scf/hr on a daily average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The heater unit shall be fired exclusively on PUC-quality natural gas and waste gas/refinery produced fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input of waste gas/refinery produced fuel gas waste gas to solvent plant heater, calculated as product of flow rate (scf/day) and higher heating value (MMBtu/scf), shall not exceed 72 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO



Arnaud Marjollet, Director of Permit Services

S-44-2-26 - Nov 21 2016 11:02AM - DAVIDSOS - Joint Inspection NOT Required

7. Waste gas/refinery produced fuel gas may be combusted in the solvent plant heater by the pilot gas flame at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Waste gas/refinery produced fuel gas shall be burned in C.B. boiler S-44-13 and/or solvent plant heater S-44-2. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Refinery produced gas shall be treated in H2S scrubber listed in S-44-13. [District Rule 2201] Federally Enforceable Through Title V Permit
10. H2S content of gas burned shall not exceed 0.1 gr/dscf (161 ppmv) based on a three hour rolling average. [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
11. Solvent plant heater emission rates shall not exceed any of the following: NO_x - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu, CO - 400 ppmv @ 3% O₂, VOC - 5.5 lb/MMscf of fuel gas, PM₁₀ - 7.6 lb/MMscf of fuel gas, or SO_x - 5 gr of total sulfur per 100 standard cubic feet of fuel gas. [District Rules 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
12. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
15. 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 4305 and 4306] Federally Enforceable Through Title V Permit
16. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
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 4305 and 4306] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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 4305 and 4306] 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 Rules 4305 and 4306] Federally Enforceable Through Title V Permit
24. 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 Rules 4305 and 4306] Federally Enforceable Through Title V Permit
25. Permittee shall maintain accurate records of fuel type and heating value, daily and annual fuel consumption, and annual emissions from heaters. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of the occurrence of and duration of any startup, shutdown, or malfunction in the operation of the solvent plant heater, or any malfunction of the air pollution control equipment. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. The portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
31. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
32. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
33. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

35. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
36. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. The owner or operator shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument is 425 mg/dscm H₂S. The performance evaluations for this H₂S monitor shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations. [40 CFR Part 60, Subpart J, 60.105(a)(4)(i)(iii)] Federally Enforceable Through Title V Permit
38. Continuous emissions monitoring (CEM) results shall be calculated on a rolling three (3) hour average. [40 CFR 60.105(e)] Federally Enforceable Through Title V Permit
39. The owner or operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm or 161 ppmv). [40 CFR 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
40. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
41. Pursuant to Rule 4320, the operator shall pay an annual emission fee to the District for NO_x emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NO_x emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
42. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
43. The permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-3-21

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF DORMANT LUBE OIL FINISHING PLANT INCLUDING 6 MMBTU/HR CHARGE VERTICAL CYLINDRICAL HEATER, TWO HYDROGEN REACTORS, TWO COMPRESSORS, SEPARATORS, FLASH POT, AMINE TREATER WITH RECEIVER AND REGENERATOR, H2S PRODUCT STRIPPER (3-D-51), STRIPPER ACCUMULATOR, UTILITY FRACTIONATOR COLUMN (D-11) (SHARED WITH S-44-4), AND H2S SCRUBBER AND FLARE SERVING HYDROGEN RICH WASTE GAS STREAM: REMOVE SLC SHARED WITH FACILITY 73

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 fuel supply line shall be physically disconnected from the 5 MMBtu/hr vertical cylindrical heater [District Rule 4307]
4. The 5 MMBtu/hr vertical cylindrical heater shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4307 and all other applicable District regulations. [District Rule 4307]
5. In the natural gas line to the charge heater, the permittee shall permanently install a calibrated orifice plate having a diameter not exceeding 0.3501 inches. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

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6. The diameter of natural gas fuel line orifice shall be permanently stamped on the orifice plate and shall be readily accessible and viewable by District inspection staff. A copy of the orifice sizing calculations shall be made available to District inspection staff upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The charge heater shall be fired solely on PUC regulated natural gas or fuel oil. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Simultaneous firing of natural gas and fuel oil in the charge heater is prohibited. [District NSR Rule] Federally Enforceable Through Title V Permit
9. In the fuel oil line to the charge heater, the permittee shall permanently install a calibrated orifice plate having a diameter not exceeding 0.0581 inches. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The diameter of the fuel oil line orifice shall be permanently stamped on the orifice plate and shall be readily accessible and viewable by District inspection staff. A copy of the orifice sizing calculations shall be made available to District inspection staff upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
12. H2S product stripper column includes vapor piping to H2S scrubber and flare serving hydrogen rich waste gas stream and to refinery waste gas system listed in S-44-13, and liquid piping to tank S-44-157. [District NSR Rule] Federally Enforceable Through Title V Permit
13. There shall be no detectable volatile organic compound (VOC) emissions from valves and flanges or from pressure relief valves during normal operation. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Hydrogen reactors may be used in parallel configuration (one at a time) or in series configuration (concurrently). [District NSR Rule] Federally Enforceable Through Title V Permit
15. Hydrogen rich waste gas stream shall be equipped with continuously recording flowrate meter. [District NSR Rule] Federally Enforceable Through Title V Permit
16. H2S scrubber serving hydrogen rich waste gas shall be equipped with continuous operation H2S monitor on outlet of H2S scrubber. [District Rule 4801] Federally Enforceable Through Title V Permit
17. Excess sour gas from flash pot, stripper accumulator and amine regenerator shall discharge only to hydrogen rich waste gas stream H2S scrubber. [District NSR Rule] Federally Enforceable Through Title V Permit
18. VOC emissions from fugitive components associated with H2S product stripper column shall not exceed 1.0 lb/day. VOC emissions from fugitive components installed after April 2000 on utility fractionator column shall not exceed 1.7 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Fugitive emission calculations shall be performed using API Publication 4322 for emission factors and control efficiencies for inspection and maintenance program established in EPA Publication 450/3-83-007. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Hydrogen rich waste gas flowrate to H2S scrubber and flare shall not exceed 50,400 dscf/day. Flowrate (dscf/day) may be calculated using wet gas mass flowrate measurement corrected for water content. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Refinery produced fuel gas, except hydrogen rich waste gas stream, shall be treated in H2S scrubber listed in S-44-13 and burned in boiler S-44-13 or solvent plant heater S-44-2. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Charge heater gas-fired emission rates shall not exceed any of the following limits: 0.1000 lb-NO_x/MMBtu, 0.0840 lb-CO/MMBtu, 0.0055 lb-VOC/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0143 lb-SO_x/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Charge heater oil-fired emission rates shall not exceed any of the following limits: 0.1460 lb-NO_x/MMBtu, 0.0365 lb-CO/MMBtu, 0.0015 lb-VOC/MMBtu, 0.0241 lb-PM₁₀/MMBtu, or 0.0518 lb-SO_x/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
25. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas and fuel oil combusted in the unit shall be installed, utilized and maintained. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Permittee shall maintain accurate records of hydrogen rich waste gas (off gas) produced (dscf/day), charge heater fuel type, daily and annual charge heater fuel consumption, and annual emissions from charge heater. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Permittee shall maintain annual records of fugitive component count and corresponding emission calculations for components installed in conjunction with the H₂S product stripper column and components installed after April 2000 for the utility fractionator. [District NSR Rule] Federally Enforceable Through Title V Permit
29. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
31. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
32. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-4-21

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF DORMANT 4.5 MMBTU/HR LUBE OIL FINISHING PLANT - UTILITY FRACTIONATOR INCLUDING THREE ATMOSPHERIC COLUMN NOS. D-11, D-21, & D-31, STANDBY HEATER NOS. 11, 21, & 31, AND HEAT OIL EXCHANGER NOS. E 551, E-552, & E-553: REMOVE SLC SHARED WITH FACILITY 73

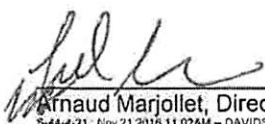
CONDITIONS

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. No modification to heaters #11, #21, and #31 shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
4. The fuel supply line shall be physically disconnected from heaters #11, #21, and #31 while dormant. [District Rules 2201, 4306, 4307] Federally Enforceable Through Title V Permit
5. Heaters #11, #21, and #31 shall not be operated for any reason until Authority to Construct permits are issued approving all necessary retrofits required to comply with the applicable requirements of either Rule 4306 or 4307 and all other applicable District regulations. [District Rules 4306, 4307] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO



Arnaud Marjollet, Director of Permit Services

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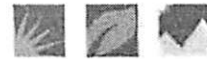
6. In the fuel line to standby heater #21, the permittee shall permanently install a calibrated orifice plate having a diameter not exceeding 0.3501 inches. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The diameter of the orifice shall be permanently stamped on the orifice plate of standby heater #21, and shall be readily accessible and viewable by District inspection staff. A copy of the orifice sizing calculations shall be made available to District inspection staff upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The standby heaters shall be fired solely on PUC regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. No modifications to heaters #11 and #31 shall be performed without an Authority to Construct for that modification, except for changes specified in the following condition. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Heaters #11 and #31 shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Refinery produced fuel gas shall be treated in H₂S scrubber listed in S-44-13. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Refinery produced fuel gas shall be burned in C.B. boiler S-44-13 and/or solvent plant heater S-44-2. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Heaters #11, #21, and #31 shall not be fired at greater than 4.5 MMBTU/hr for all three heaters. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Crude oil throughput for S-44-1 and S-44-4 combined shall not exceed 12,800 barrels per day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emissions from any of the standby heaters (#11, 21, 31) shall not exceed any of the following limits: 0.10 lb-NO_x/MMBtu, 0.084 lb-CO/MMBtu, 0.0055 lb-VOC/MMBtu, 0.0076 PM₁₀/MMBtu, or 0.00285 lb-SO_x/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Upon resuming operation of heater #21, the heater shall be tuned at least twice per calendar year (from four to eight months apart) by a qualified technician in accordance with the procedure described in Rule 4304. If the unit does not operate during a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. If the unit does not operate during a calendar year, no tune-up is required for that calendar year. [District Rule 4307] Federally Enforceable Through Title V Permit
18. Upon resuming operation of heater #21, the heater may be test-fired to verify availability for its intended use. Such test-firing is not considered operation for the purpose of requiring a tune-up provided the heater is shutdown once test firing is complete. [District Rule 4307] Federally Enforceable Through Title V Permit
19. Upon resuming operation of heaters #11 and #31, the stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 4305] Federally Enforceable Through Title V Permit
20. Sampling facilities for source testing shall be provided in accordance with the provisions of District Rule 1081 (amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
21. Upon resuming operation of heaters #11 and #31, source testing to measure NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
22. Upon resuming operation of heaters #11 and #31, source testing to measure NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

23. Upon resuming operation of heaters #11 and #31, if permittee fails any compliance demonstration for NO_x or CO emission limits when testing not less than once every 36 months, compliance with NO_x and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
24. Upon resuming operation of heaters #11 and #31, source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NO_x and CO source testing requirement. [District Rules 4305, and 4351] Federally Enforceable Through Title V Permit
25. Upon resuming operation of heaters #11 and #31, compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Upon resuming operation of heaters #11 and #31, source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Upon resuming operation of heaters #11 and #31, the results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Upon resuming operation of heaters #11 and #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, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351] Federally Enforceable Through Title V Permit
29. Upon resuming operation of heaters #11 and #31, if the NO_x or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall notify the District and take corrective action as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of the date and time of NO_x, CO, and O₂ measurements, the measured NO₂ and CO concentrations corrected to 3% O₂, and the O₂ concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
31. Permittee shall maintain accurate records of fuel type, annual fuel consumption, annual emissions from the heaters, and daily crude oil throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District Rule 2201] Federally Enforceable Through Title V Permit
33. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. Upon resuming operation of heaters #11 and #31, the portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
36. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type of fuel combusted. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

37. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
38. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by maintaining copies of fuel invoices, gas purchase contracts, or supplier certifications. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
39. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). Compliance with this requirement may be demonstrated by maintaining copies of fuel invoices, gas purchase contracts, or supplier certifications. [District Rule 4801] Federally Enforceable Through Title V Permit
40. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
41. Nitrogen oxide (NO_x) emissions from each heater shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
42. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
43. Upon resuming operation of heaters #11 and #31, annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO_x and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
44. Upon resuming operation of heaters #11 and #31, the following conditions must be met for representative unit(s) to be used to test for NO_x and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
45. Upon resuming operation of heaters #11 and #31, all units in a group for which representative units are source for NO_x and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
46. Upon resuming operation of heaters #11 and #31, all units in a group for which representative units are source tested to for NO_x and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
47. Upon resuming operation of heaters #11 and #31, the number of representative units source tested for NO_x and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-5-14

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 **TOWNSHIP:** 29S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 99.9 MMBTU/HR NATURAL GAS-FIRED ZURN MODEL 15M KEYSTONE BOILER WITH COEN STAGED AIR BURNER AND FLUE GAS RECIRCULATION: REMOVE SLC SHARED WITH FACILITY 73

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. Burner shall be fired exclusively on PUC-regulated natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Gas-firing rate shall not exceed 94,612 scf per hour. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @3% O2 or 0.031 lb/MMBtu, CO: 400 ppmv @ 3% O2 or 0.30 lb/MMBtu. [District Rules 4305, 5.1.1, 4306, 5.1.1 and 4351] Federally Enforceable Through Title V Permit
6. Emissions shall not exceed any of the following: 0.0056 lb-VOC/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.0006 lb-SOx/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-44-5-14 Nov 21 2016 11:02AM - DAVIDSOB Joint Inspection NOT Required

7. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
10. 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 4305 and 4306] Federally Enforceable Through Title V Permit
11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
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 4305 and 4306] Federally Enforceable Through Title V Permit
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 4305 and 4306] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

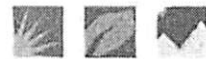
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications 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 Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. 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 Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. Permittee shall maintain accurate records of fuel type, daily fuel consumption, annual fuel consumption and annual emissions from the boiler, and shall make such records available for District inspection for five years. [District NSR Rule and 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
25. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
27. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
28. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
29. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or EPA Method 6; or CARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305 and 4306, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
33. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801] Federally Enforceable Through Title V Permit
34. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rules 4305 and 4306, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
35. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
36. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305 and 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
38. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 4305 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
39. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
40. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 4305 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
41. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
42. Pursuant to Rule 4320, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

43. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
44. The permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-6-14

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF DORMANT 65 MMBTU/HR SHIPPING & RECEIVING OPERATION INCLUDING 45 MMBTU/HR ASPHALT SHIPPING FORCED DRAFT HEATER AND 20 MMBTU/HR CIRCULATING (RETORT) NATURAL DRAFT VERTICAL CYLINDRICAL HEATER: REMOVE SLC SHARED WITH FACILITY 73

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. No modification to the 45 MMBtu/hr asphalt shipping heater shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
4. The fuel supply line of the 45 MMBtu/hr asphalt shipping heater shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. This 45 MMBtu/hr asphalt shipping heater shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-44-6-14 / Nov 21 2016 11:02AM - DAVIDSOS : Joint Inspection NOT Required

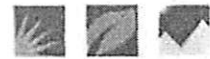
6. If continuous operation oxygen analyzer/controller is utilized, excess O₂ shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Asphalt shipping heater (forced draft) shall be fired on oil or natural gas. Retort heater (natural draft) shall be fired on natural gas. Neither heater shall incinerate refinery produced gas. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Asphalt shipping heater and retort heater shall each be equipped with recording fuel flow meter. [District Rule 4305 and 4351] Federally Enforceable Through Title V Permit
9. Asphalt shipping heater shall operate as a replacement standby unit and shall not be fired for more than 90 billion Btu/year. [District Rule 4305] Federally Enforceable Through Title V Permit
10. Asphalt shipping heater shall only fire on oil during periods of involuntary natural gas curtailment. Heater shall not be fired on oil for more than 336 hours per year, except for 48 hours per year for maintenance and testing. [District Rule 4351] Federally Enforceable Through Title V Permit
11. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Gas fired emission rate from 45 MMBtu/hr forced draft asphalt shipping heater shall not exceed: NO_x, 95 ppmv @3% O₂ or 0.10 lb/MMBtu, and CO, 400 ppmv @3% O₂. [District Rule 4351] Federally Enforceable Through Title V Permit
13. Gas fired emission rate from 20 MMBtu/hr natural draft retort heater shall not exceed: NO_x, 147 ppmv @3% O₂ or 0.18 lb/MMBtu, and CO, 400 ppmv @3% O₂. [District Rule 4305 and 4351] Federally Enforceable Through Title V Permit
14. The retort heater stack concentration of NO_x (as NO₂), CO, and O₂ shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 4305] Federally Enforceable Through Title V Permit
15. Source testing of retort heater to measure NO_x and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4351] Federally Enforceable Through Title V Permit
16. Source testing of the retort heater to measure NO_x and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4351] Federally Enforceable Through Title V Permit
17. If permittee fails any compliance demonstration for NO_x and CO emission limits when testing not less than once every 36 months, compliance with NO_x and CO emission limits for the retort heater shall be demonstrated not less than once every 12 months. [District Rule 4351] Federally Enforceable Through Title V Permit
18. Source testing shall be performed to demonstrate compliance with NO_x and CO emission limits within 60 days of introducing fuel for which the unit has not been source tested on in the previous 12 months. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: 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, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

22. If the retort heater NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall notify the District and take corrective action as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 4305] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of the date and time of retort heater NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
24. Asphalt heater and heater A shall be either tuned at least once each calendar year in which it operates by a qualified technician in accordance with Rule 4304, or operated with exhaust oxygen concentration no greater than 3.00% by volume on a dry basis. [District Rule 4305] Federally Enforceable Through Title V Permit
25. Asphalt heater shall be operated in accordance with the manufacturer's recommendations. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of monthly and annual fuel consumption for each heater, and annual emissions from heaters. [District NSR Rule, 4305, and 4351] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District NSR Rule] Federally Enforceable Through Title V Permit
28. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. The portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
31. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
32. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
33. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
35. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or EPA Method 6; or CARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. If the unit is fired on noncertified liquid fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
39. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or 3.0% by weight for residual oil (including crude or topped crude); or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801] Federally Enforceable Through Title V Permit
41. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
42. Nitrogen oxide (NO_x) emissions from each heater shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
43. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-44-13-24

ISSUANCE DATE: 11/21/2016

LEGAL OWNER OR OPERATOR: TRICOR REFINING, LLC
MAILING ADDRESS: PO BOX 5877
BAKERSFIELD, CA 93308

LOCATION: 1134 MANOR STREET
BAKERSFIELD, CA

SECTION: 07 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF DORMANT (COMPLIANT) 100 MMBTU/HR CLEAVER BROOKS BOILER INCLUDING JOHN ZINK LOW NOX BURNER, H2S CAUSTIC SCRUBBER, CONTINUOUS H2S MONITOR, & BACKUP H2S REMOVAL SYSTEM WITH "SULFATREAT" ADSORBENT VERTICAL COLUMN FUEL GAS SCRUBBER WITH NOMINAL DIMENSIONS 18' LONG BY 4' DIAMETER: REMOVE SLC SHARED WITH FACILITY 73 AND FEDERAL PSD CONDITIONS

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. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
4. The fuel supply line shall be physically disconnected from this unit when dormant. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
6. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

7. H₂S removal system includes two H₂S scrubbers, waste gas knockout pot, fresh and spent caustic storage tanks, and various liquid pumps. [District NSR Rule] Federally Enforceable Through Title V Permit
8. H₂S content of refinery fuel gas burned shall not exceed 0.1 gr/dscf (161 ppmv) based on a three hour rolling average. [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
9. Refinery produced fuel gas burned shall be from crude fractionation plant S-44-1, solvent extraction plant S-44-2, lube oil hydrotreater S-44-3 (except hydrogen stream), and lube oil fractionator S-44-4. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Refinery produced fuel gas shall be burned in C.B. boiler S-44-13 and/or solvent plant heater S-44-2. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed NO_x (as NO₂): 25 ppmvd @3% O₂ or 0.03 lb/MMBtu, and CO: 400 ppmvd @ 3% O₂. [District Rules 4301, 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
12. Sum of annual emissions from heaters and boilers listed on permits S-44-1, -2, -3, -4, -5, -6 and -13 shall not exceed any of the following: CO - 154.66 tpy, VOC - 7.39 tpy. [District NSR Rule] Federally Enforceable Through Title V Permit
13. 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 4305 and 4306] Federally Enforceable Through Title V Permit
14. 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 4305 and 4306] Federally Enforceable Through Title V Permit
15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of: (1) the date and time of 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 Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion 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 4305, 4306, 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4351] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
21. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4351] Federally Enforceable Through Title V Permit
22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4351] Federally Enforceable Through Title V Permit
23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4351] Federally Enforceable Through Title V Permit
24. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
26. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2.1; 4306, 6.2.1, and 4351, 6.2.1] Federally Enforceable Through Title V Permit
27. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Permittee shall maintain accurate records of fuel type, fuel consumption, boiler feedwater/produced steam rate, and annual emissions from the boiler, and shall make such records available for District inspection for five years. [District NSR Rule and 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of the occurrence of and duration of any startup, shutdown, or malfunction in the operation of the C.B. boiler, or any malfunction of the air pollution control equipment. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. The portable analyzer shall be calibrated each day of use with a two-point calibration method (zero and span) at beginning of the day. Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
33. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
34. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
35. Particulate matter emissions shall not exceed 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
37. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or EPA Method 6; or CARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
39. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801] Federally Enforceable Through Title V Permit
41. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
42. The owner or operator shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument is 425 mg/dscm H₂S. The performance evaluations for this H₂S monitor shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations. [40 CFR Part 60, Subpart J, 60.105(a)(4)(i)(iii)] Federally Enforceable Through Title V Permit
43. Continuous emissions monitoring (CEM) results shall be calculated on a rolling three (3) hour average. [40 CFR 60.105(e)] Federally Enforceable Through Title V Permit
44. The owner or operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm or 161 ppmv). [40 CFR 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
45. Pursuant to Rule 4320, the operator shall pay an annual emission fee to the District for NO_x emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NO_x emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
46. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit