



JUL 08 2010

Ms. Patty Kusek  
Kern Oil and Refining Company  
7724 E Panama Lane  
Bakersfield, CA 93307

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-37  
Project # S1094422**

Dear Ms. Kusek:

The Air Pollution Control Officer has issued an Authority to Construct (S-37-2-7) with a Certificate of Conformity to Kern Oil and Refining Company at 7724 East Panama Lane in Bakersfield. Kern Oil and Refining is proposing to modify their rerun unit S-37-2 to process transmix by adding a 20 MM Btu/hr maximum heat input process heater/reboiler, vessels and sulfur absorbers.

Enclosed is the Authority to Construct. The application and proposal were sent to US EPA Region IX on May 28, 2010. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

Prior to operating with 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.

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

Sincerely,



David Warner  
Director of Permit Services

DW: SPL/cm

Enclosures

**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



JUL 08 2010

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

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-37  
Project # S1094422**

Dear Mr. Rios:

The Air Pollution Control Officer has issued an Authority to Construct (S-37-2-7) with a Certificate of Conformity to Kern Oil and Refining Company at 7724 East Panama Lane in Bakersfield. Kern Oil and Refining is proposing to modify their rerun unit S-37-2 to process transmix by adding a 20 MM Btu/hr maximum heat input process heater/reboiler, vessels and sulfur absorbers.

Enclosed is a copy of the Authority to Construct. The application and proposal were sent to US EPA Region IX on May 28, 2010. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

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

Sincerely,



David Warner  
Director of Permit Services

DW: SPL/cm

Enclosures

**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



JUL 08 2010

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

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-37  
Project # S1094422**

Dear Mr. Tollstrup:

The Air Pollution Control Officer has issued an Authority to Construct (S-37-2-7) with a Certificate of Conformity to Kern Oil and Refining Company at 7724 East Panama Lane in Bakersfield. Kern Oil and Refining is proposing to modify their rerun unit S-37-2 to process transmix by adding a 20 MM Btu/hr maximum heat input process heater/reboiler, vessels and sulfur absorbers.

Enclosed is a copy of the Authority to Construct. The application and proposal were sent to US EPA Region IX on May 28, 2010. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

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

Sincerely,

David Warner  
Director of Permit Services

DW: SPL/cm

Enclosures

**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-37-2-7

**ISSUANCE DATE:** 07/06/2010

**LEGAL OWNER OR OPERATOR:** KERN OIL & REFINING COMPANY  
**MAILING ADDRESS:** 7724 E PANAMA LANE  
BAKERSFIELD, CA 93307-9210

**LOCATION:** PANAMA LN & WEEDPATCH HWY  
BAKERSFIELD, CA 93307-9210

**SECTION:** 25 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 77.5 HP RERUN UNIT INCLUDING PRE-FLASH DRUM, FRACTIONATOR, STRIPPER, ACCUMULATOR, AND ASSOCIATED VALVES, FLANGES, AND CONNECTORS: ADD TRANSMIX UNIT INCLUDING A REBOILER HEATER WITH A MAXIMUM RATING 20 MMBTU AND WITH GLSF MIN LOW-NOX BURNER (OR EQUIVALENT), CRI SCR CATALYST (OR EQUIVALENT), VESSELS, AND SULFUR ADSORBERS

### 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 NSR Rule] 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 air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. A non-resettable fuel meter shall be installed on the fuel line to the heater. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Heater burners shall be one of the following, or District approved equivalent: Zeeco Incorporated Model GLSF Free Jet burner or GLSF min emission burner, or Callidus Technologies Model Ultra Blue burner, LE-CSG, LE-CRG, CSG or CSGC burner, or John Zink Coolstar 200 series, Coolstar 300 series, Todd Variflame II, or Todd LCF (Coolfuel), or Maxon Low NOx Optima SLS burner. [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



\_\_\_\_\_  
DAVID WARNER, Director of Permit Services

S-37-2-7 : Jul 6 2010 005AM - LEONARDS : Joint Inspection NOT Required

6. Heater shall be equipped with a selective catalytic reduction catalyst and ammonia injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
10. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
11. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit
12. The operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
13. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit
14. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit
15. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit
16. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit
17. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit
19. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit
20. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit
21. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit
22. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit
23. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit
24. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit
25. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit
26. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

27. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit
28. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit
29. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
30. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit
31. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit
32. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit
33. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit
34. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

35. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit
36. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit
37. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit
38. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit
39. Permittee shall comply with all applicable monitoring, testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and Ja. [District Rule 4001] Federally Enforceable Through Title V Permit
40. Affected facilities for which construction or modification commenced after November 7, 2006, shall comply with applicable requirements of 40CFR, Subpart GGGa. [40CFR60.590a(a)] Federally Enforceable Through Title V Permit
41. Except for flares, affected facilities for which construction or modification commenced after May 14, 2007, shall comply with applicable requirements of 40 CFR, Subpart Ja. For flares, the provisions of this subpart apply only to flares which commence construction, modification, or reconstruction, after June 24, 2008. [40 CFR 60.100a(b)] Federally Enforceable Through Title V Permit
42. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
43. Heater shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
44. Sulfur content of fuel combusted in this unit shall not exceed 5 grains total sulfur per 100 standard cubic feet. [District Rules 2201 and 4320, 5.4.1.2] Federally Enforceable Through Title V Permit
45. All refinery fuel gas combusted in the heaters shall be monitored for H<sub>2</sub>S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart Ja, 60.102a(g)(ii)] Federally Enforceable Through Title V Permit
46. Within 60 days of initial operation and at least once per year thereafter, permittee shall obtain and analyze a representative sample for total reduced sulfur of the fuel combusted in this unit. Each sample shall be analyzed for the following reduced sulfur compounds: carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, hydrogen sulfide and methyl mercaptan. For each sample, permittee shall record the analytical results for total sulfur, calculated as the sum of the results for all analytes, expressed as H<sub>2</sub>S, and shall calculate and record the ratio of total sulfur to H<sub>2</sub>S. Samples shall be analysed using ASTM D6228-98, or an alternative analytical method approved in advance by the APCO. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE



47. The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the product of the fuel H<sub>2</sub>S concentration and the ratio of total sulfur to H<sub>2</sub>S, based on the most recently conducted fuel sample analysis for total sulfur. The total sulfur of the fuel shall be calculated for each one hour H<sub>2</sub>S monitoring result, and the hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201] Federally Enforceable Through Title V Permit

48. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

49. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a: 1995 EPA Protocol Refinery Correlation Equations for Refineries and Marketing Terminals. Permit holder shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

50. Emission rates from the heater, except during startup and shutdown, shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>): 5 ppmv @ 3% O<sub>2</sub> or 0.0061 lb/MMBtu, VOC: 0.0055 lb/MMBtu, PM<sub>10</sub>: 0.0076 lb/MMBtu or CO: 50 ppmv @ 3% O<sub>2</sub>. [District Rules 2201, 2520, 4301, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit

51. The ammonia emissions (ammonia slip) shall not exceed 10 ppmvd @ 3% O<sub>2</sub> over a 15 minute averaging period. [District Rule 4102]

52. The maximum annual amount of fuel combusted in this heater shall not exceed 168,962 MMBtu/year. [District Rule 2201] Federally Enforceable Through Title V Permit

53. Permittee shall record daily and annual fuel use for the heater unit. [District Rules 1080, 2201] Federally Enforceable Through Title V Permit

54. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

55. The duration of each startup and shutdown period for each heater shall not exceed 12 hours and 9 hours respectively. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

56. The permittee shall record the date and the duration of each startup and each shutdown. [District Rules 4305 and 4306, and 4320] Federally Enforceable Through Title V Permit

57. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub> at least once during each month in which source testing is not performed. NO<sub>x</sub>, CO and O<sub>2</sub> monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH<sub>3</sub> monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. 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 it has been performed within the last month. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit

58. If the NO<sub>x</sub>, CO or NH<sub>3</sub> concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following 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 that is subject to enforcement action has occurred. 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 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit

59. All NO<sub>x</sub>, CO, O<sub>2</sub> and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO<sub>x</sub>, CO and O<sub>2</sub> analyzer as well as the NH<sub>3</sub> emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
60. Ammonia emission readings shall be conducted at the time the NO<sub>x</sub>, CO and O<sub>2</sub> readings are taken. The readings shall be converted to ppmvd @ 3% O<sub>2</sub>. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
61. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, NH<sub>3</sub>, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (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 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
62. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
63. Source testing to demonstrate compliance with NO<sub>x</sub>, CO, and NH<sub>3</sub> emission limits shall be conducted within 60 days of startup and not less than once every 12 months, except as provided below. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
64. Source testing to demonstrate compliance with NO<sub>x</sub>, CO, and NH<sub>3</sub> emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
65. If permittee fails any compliance demonstration for NO<sub>x</sub>, CO, or NH<sub>3</sub> emission limits when testing not less than once every 36 months, compliance with NO<sub>x</sub>, CO, and NH<sub>3</sub> emission limits shall be demonstrated not less than once every 12 months. [District Rules 4102, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
66. 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
67. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
68. 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
69. 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
70. The following test methods shall be used unless otherwise approved by the APCO and EPA: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (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 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
71. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B [District Rule 1081] Federally Enforceable Through Title V Permit
72. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
73. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

74. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
75. 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 averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (thv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
76. Draeger tubes shall be used as an alternative method for measuring fuel gas H<sub>2</sub>S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H<sub>2</sub>S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H<sub>2</sub>S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
77. Operator shall maintain all records of the reason for alternative monitoring, heater fuel usage, and required fuel gas H<sub>2</sub>S 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
78. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits in the following quantities: 1st quarter - 267 lbs, 2nd quarter - 267 lbs, 3rd quarter - 267 lbs, and 4th quarter - 268 lbs. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
79. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits to offset both SOx (as SO<sub>2</sub>) and PM<sub>10</sub> increases in emissions in the following quantities: 1st quarter - 963 lbs, 2nd quarter - 963 lbs, 3rd quarter - 963 lbs, and 4th quarter - 963 lbs. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
80. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits in the following quantities: 1st quarter - 374 lbs, 2nd quarter - 375 lbs, 3rd quarter - 375 lbs, and 4th quarter - 375 lbs. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
81. BRC Certificate Numbers S-2882-1, N-878-2, N-879-2, S-2653-2, and S-2387-5 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit