



MAR 11 2015

Mr. David Campbell
San Joaquin Refining Company
3542 Shell Street
Bakersfield, CA 93308

**Re: Notice of Minor Title V Permit Modification
District Facility # S-36
Project # S-1150490**

Dear Mr. Campbell:

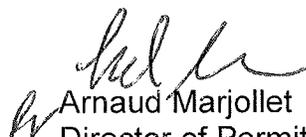
Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-36-37-15 (under project S-1143794) into the Title V operating permit. The modification authorized process heaters LH-1 and LH-2, listed on permit S-36-37-13, to combust non-PUC quality natural gas, i.e. field gas, from a nearby crude oil production facility.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-36-37-15, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,


Arnaud Marjollet
Director of Permit Services

Enclosures

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

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

TITLE V APPLICATION REVIEW

Minor Modification

Project #: S36, 1150490

Engineer: Steve Davidson

Date: March 9, 2015

Facility Number: S-36
Facility Name: San Joaquin Refining Company, Inc
Mailing Address: 3542 Shell Street
Bakersfield, CA 93308

Reviewed by AP SUPER ADE

MAR 09 2015

Contact Name: David Campbell
Phone: (661) 852-2504

Responsible Official: Pat Oveson
Title: Refinery Manager

I. PROPOSAL

San Joaquin Refining Company, Inc (SJRC) is proposing a Title V minor permit modification to incorporate Authority to Construct (ATC) #S-36-37-15 into SJRC's Title V permit. This ATC authorized two process heaters, LH-1 and LH-2, listed on permit S-36-37-13 to combust non-PUC quality natural gas, i.e. field gas, from a nearby crude oil production facility. No increase in permitted emissions was proposed.

Conditions will be placed on the permit to ensure the units make the requirements of District Rules.

II. FACILITY LOCATION

The facility is located at the corner of Standard and Shell Streets in Bakersfield.

III. EQUIPMENT DESCRIPTION

S-36-37-16: LUBE OIL FINISHING PLANT WITH 16.5 MMBTU/HR NATURAL GAS/FIELD GAS-FIRED NATURAL DRAFT EXTRACT HEATER LH-1, 12.6 MMBTU/HR NATURAL GAS/FIELD-FIRED FORCED DRAFT HOT OIL HEATER LH-2 WITH FGR, 12.0 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-3 WITH LOW NOX BURNERS AND FGR, ABSORBER T-1, TREATING TOWER T-2, EXTRACT DRYER T-5/T-6, MP FLASH DRUM D-5, EXPANSION DRUM D-9, BLOWDOWN DRUM D-7, AND SETTLER D-1

IV. SCOPE OF EPA AND PUBLIC REVIEW

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

V. APPLICABLE REQUIREMENTS

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

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

The Authority to Construct (ATC) authorized two process heaters, LH-1 and LH-2, listed on permit S-36-37-13 to combust non-PUC quality natural gas, i.e. field gas, from a nearby crude oil production facility. No increase in permitted emissions was proposed.

Condition # on PTO S-36-37-13	Condition # on Propose PTO S-36-37-16	Condition is New, Modified, or Removed	Reason for Change from Current PTO
4	4	Modified	Condition requiring all heaters to be burned on PUC quality natural gas changed to require on Heater LH-3 to fire exclusively on PUC quality natural gas.
21	21	Modified	Emissions factor condition, for Heater LH-1 modified to include SOx: 0.00285 lb-SOX/MMBtu
22	22	Modified	Emissions factor condition, for Heater LH-2 modified to include SOx: 0.00285 lb-SOX/MMBtu
24	--	Removed	Condition requiring start up testing and annual testing removed. Condition (new #24) requiring sources testing every 36 months remains on the permit.
--	60	New	4320 fee paying unit general condition added to the permit.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for

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

Because these permit revisions meet all the above criteria, this is a Minor Modification.

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

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

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit
- B. Authority to Construct
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit

ATTACHMENT A

Proposed Modified Title V Operating Permit #
S-36-37-16

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-36-37-16

EXPIRATION DATE: 08/31/2016

SECTION: 24 TOWNSHIP: 29S RANGE: 27E

EQUIPMENT DESCRIPTION:

LUBE OIL FINISHING PLANT WITH 16.5 MMBTU/HR NATURAL GAS/FIELD GAS-FIRED NATURAL DRAFT EXTRACT HEATER LH-1, 12.6 MMBTU/HR NATURAL GAS/FIELD-FIRED FORCED DRAFT HOT OIL HEATER LH-2 WITH FGR, 12.0 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-3 WITH LOW NOX BURNERS AND FGR, ABSORBER T-1, TREATING TOWER T-2, EXTRACT DRYER T-5/T-6, MP FLASH DRUM D-5, EXPANSION DRUM D-9, BLOWDOWN DRUM D-7, AND SETTLER D-1

PERMIT UNIT REQUIREMENTS

1. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
2. The duration of each startup and shutdown period for the 16.5 MMBtu/hr heater LH-1 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period for the 12.6 MMBtu/hr heater LH-2 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
4. 12.0 MMBtu/hr heater LH-3 shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Absorber T-1 overhead condensibles shall be transported in a closed system to a closed oil/water separation operation to prevent emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Solvent dry tanks shall be closed and equipped with operational conservation pressure relief valves or connected to an approved vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Nash vacuum pump system vapors and Absorber T-1 overhead vapors shall be vented exclusively to activated carbon canister vapor control system. [District NSR Rule and 4453] Federally Enforceable Through Title V Permit
8. Carbon canister vapor collection system serving Absorber T-1 and Nash vacuum system shall be maintained with a minimum of two (2) carbon canisters connected in series, except during change-out of spent canister(s). [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall monitor daily for VOC concentration of gas between the carbon canisters and at the discharge of the final carbon canister. [District NSR Rule] Federally Enforceable Through Title V Permit
10. VOC concentration at exhaust outlet for carbon canister system shall not exceed 134 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Vapor flow rate to carbon canister system shall not exceed 480 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Carbon canisters shall be replaced whenever effluent gas VOC concentration exceeds 134 ppmv at outlet. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Carbon canister vapor control system shall be maintained leak-free (less than 10,000 ppmv @ 1 cm from source) [District NSR Rule] Federally Enforceable Through Title V Permit
14. Nash vacuum system vapors and Absorber T-1 overhead vapors shall be monitored continuously for H₂S at the carbon canister system exhaust point, with alarm set at 1 ppmv - H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
15. H₂S emissions from first stage and second stage carbon canisters shall be tested daily, and shall be replaced as required to ensure exhaust to atmosphere does not exceed 1 ppmv-H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Carbon canisters shall be serviced in a manner preventing the release of VOCs into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 6.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Upon shutdown, vessels containing VOC's shall be controlled per Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
20. Spent, used or contaminated solvent shall not be stored in tanks or containers not connected to an approved vapor control system nor disposed of by introduction into the oily water sewer system. [District NSR Rule and Rule 4102] Federally Enforceable Through Title V Permit
21. Emissions from 16.5 MMBtu/hr heater LH-1 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
22. Emissions from 12.6 MMBtu/hr heater LH-2 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
23. Emissions from 12.0 MMBtu/hr heater LH-3 shall not exceed any of the following: PM₁₀: 0.004 lb/MMBtu; VOC: 0.01 lb/MMBtu; NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
24. Source testing for 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, 4306, and 4351] Federally Enforceable Through Title V Permit
25. If permittee fails any source test for NO_x and CO emissions 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, 4306, and 4351] Federally Enforceable Through Title V Permit
26. 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, 4306, and 4351] Federally Enforceable Through Title V Permit
27. 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. 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
29. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

30. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
31. Records of VOC measurements taken between the carbon canisters and at the discharge of the last carbon canister shall be maintained for a period of at least two (2) years, and made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
32. Permittee shall operate heater LH-1 as intended by manufacturer to maintain compliance with NOx and CO emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 of heaters LH-1, LH-2, and LH-3 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
34. If either the NOx (as NO2) or CO concentrations corrected to 3% O2 of heaters LH-1, LH-2, and LH-3, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements on heaters LH-1, LH-2, and LH-3, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit
38. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
39. 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, 9.4.2] Federally Enforceable Through Title V Permit
40. {2805} Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
41. {588} Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

42. 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
43. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
44. 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, 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
45. 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
46. 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
47. 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
48. 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 averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2; 4306, 8.1; and/or 4351, 8.1] Federally Enforceable Through Title V Permit
49. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 3.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
50. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere except during breakdown conditions. [District NSR Rule] Federally Enforceable Through Title V Permit
51. Emissions for the LH-1, LH-2, and LH-3 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 1081] Federally Enforceable Through Title V Permit
52. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO_x emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

53. The following conditions must be met for representative unit(s) to be used to test for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
54. All units in a group for which representative units are source for NOx 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 each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
55. All units in a group for which representative units are source tested for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
56. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
58. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rule 4801, section 3.1 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
59. Nitrogen oxide (NOx) emissions for each heater shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
60. Pursuant to Rule 4320, beginning in 2010 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

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

DRAFT

ATTACHMENT B

Authority to Construct #
S-36-37-15



AUTHORITY TO CONSTRUCT

PERMIT NO: S-36-37-15

ISSUANCE DATE: 11/18/2014

LEGAL OWNER OR OPERATOR: SAN JOAQUIN REFINING COMPANY

MAILING ADDRESS: PO BOX 5576
BAKERSFIELD, CA 93388

LOCATION: STANDARD AND SHELL ST
BAKERSFIELD, CA 93308

SECTION: 24 TOWNSHIP: 29S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF LUBE OIL FINISHING PLANT WITH 16.5 MMBTU/HR NATURAL GAS-FIRED NATURAL DRAFT EXTRACT HEATER LH-1, 12.6 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-2 WITH FGR, 12.0 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-3 WITH LOW NOX BURNERS AND FGR, ABSORBER T-1, TREATING TOWER T-2, EXTRACT DRYER T-5/T-6, MP FLASH DRUM D-5, EXPANSION DRUM D-9, BLOWDOWN DRUM D-7, AND SETTLER D-1: AUTHORIZE USE OF FIELD GAS AS FUEL IN HEATERS LH-1 AND LH-2

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 2149 lb, 2nd quarter - 2149 lb, 3rd quarter - 2149 lb, and fourth quarter - 2149 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
3. ERC Certificate Numbers C-1317-2, S-1253-2, S-1509-2, S-1735-2, S-2537-2, and S-2539-2 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 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.

ayed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-36-37-15 - Nov 18 2014 2:04PM - DAVIDS05 : Joint Inspection NOT Required

5. The duration of each startup and shutdown period for the 16.5 MMBtu/hr heater LH-1 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
6. The duration of each startup and shutdown period for the 12.6 MMBtu/hr heater LH-2 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
7. 12.0 MMBtu/hr heater LH-3 shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Absorber T-1 overhead condensibles shall be transported in a closed system to a closed oil/water separation operation to prevent emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Solvent dry tanks shall be closed and equipped with operational conservation pressure relief valves or connected to an approved vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Nash vacuum pump system vapors and Absorber T-1 overhead vapors shall be vented exclusively to activated carbon canister vapor control system. [District NSR Rule and 4453] Federally Enforceable Through Title V Permit
11. Carbon canister vapor collection system serving Absorber T-1 and Nash vacuum system shall be maintained with a minimum of two (2) carbon canisters connected in series, except during change-out of spent canister(s). [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall monitor daily for VOC concentration of gas between the carbon canisters and at the discharge of the final carbon canister. [District NSR Rule] Federally Enforceable Through Title V Permit
13. VOC concentration at exhaust outlet for carbon canister system shall not exceed 134 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Vapor flow rate to carbon canister system shall not exceed 480 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Carbon canisters shall be replaced whenever effluent gas VOC concentration exceeds 134 ppmv at outlet. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Carbon canister vapor control system shall be maintained leak-free (less than 10,000 ppmv @ 1 cm from source) [District NSR Rule] Federally Enforceable Through Title V Permit
17. Nash vacuum system vapors and Absorber T-1 overhead vapors shall be monitored continuously for H₂S at the carbon canister system exhaust point, with alarm set at 1 ppmv - H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
18. H₂S emissions from first stage and second stage carbon canisters shall be tested daily, and shall be replaced as required to ensure exhaust to atmosphere does not exceed 1 ppmv-H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Carbon canisters shall be serviced in a manner preventing the release of VOCs into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 6.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
21. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Upon shutdown, vessels containing VOC's shall be controlled per Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
23. Spent, used or contaminated solvent shall not be stored in tanks or containers not connected to an approved vapor control system nor disposed of by introduction into the oily water sewer system. [District NSR Rule and Rule 4102] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Emissions from 16.5 MMBtu/hr heater LH-1 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
25. Emissions from 12.6 MMBtu/hr heater LH-2 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
26. Emissions from 12.0 MMBtu/hr heater LH-3 shall not exceed any of the following: PM₁₀: 0.004 lb/MMBtu; VOC: 0.01 lb/MMBtu; NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
27. Source testing for 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, 4306, and 4351] Federally Enforceable Through Title V Permit
28. If permittee fails any source test for NO_x and CO emissions 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, 4306, and 4351] Federally Enforceable Through Title V Permit
29. 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, 4306, and 4351] Federally Enforceable Through Title V Permit
30. 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
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
- 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
33. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
34. Records of VOC measurements taken between the carbon canisters and at the discharge of the last carbon canister shall be maintained for a period of at least two (2) years, and made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
35. Permittee shall operate heater LH-1 as intended by manufacturer to maintain compliance with NO_x and CO emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
36. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of heaters LH-1, LH-2, and LH-3 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
37. If either the NO_x (as NO₂) or CO concentrations corrected to 3% O₂ of heaters LH-1, LH-2, and LH-3, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements on heaters LH-1, LH-2, and LH-3, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
40. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit
41. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
42. 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, 9.4.2] Federally Enforceable Through Title V Permit
43. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
44. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
45. 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
46. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
47. When complying with SOx 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, 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
48. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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
- 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

CONDITIONS CONTINUE ON NEXT PAGE

50. 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
51. 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 NO₂/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2; 4306, 8.1; and/or 4351, 8.1] Federally Enforceable Through Title V Permit
52. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 3.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
53. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere except during breakdown conditions. [District NSR Rule] Federally Enforceable Through Title V Permit
54. Emissions for the LH-1, LH-2, and LH-3 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 1081] Federally Enforceable Through Title V Permit
55. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
- The following conditions must be met for representative unit(s) to be used to test for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
57. All units in a group for which representative units are source for NOx 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 each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
58. All units in a group for which representative units are source tested for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
59. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rule 4801, section 3.1 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
62. Nitrogen oxide (NOx) emissions for each heater shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
63. Pursuant to Rule 4320, beginning in 2010 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]

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-36-37	0	0	0	0	0
Total	0	0	0	0	0

ATTACHMENT D

Application

RECEIVED
JAN 08 2015
SJVAPCD
Southern Region

December 9, 2014

Mr. Martin Keast
San Joaquin Valley Unified APCD
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244

**Subject: SAN JOAQUIN REFINING (SJR) TITLE V MODIFICATION
APPLICATION ATC S-36-37-15**

Dear Mr. Keast:

Please find enclosed one Title V Modification Application in duplicate. Steven Miller, Air Quality Inspector Southern Region, has been notified of the completion of this modification.

If you have any questions or need further information, please feel free to call me at (661) 327-8248.

Sincerely,



David Campbell
Environmental Manager

cc: Joe Selgrath – EnviroTech Consultants, Inc.

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

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: SAN JOAQUIN REFINING COMPANY, INC.	FACILITY ID: S - 36
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Majid Mojibi	
3. Agent to the Owner: Pat Oveson	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

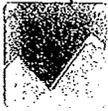
I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Pat Oveson
Signature of Responsible Official

December 9, 2014
Date

Pat Oveson
Name of Responsible Official (please print)

Refinery Manager
Title of Responsible Official (please print)



San Joaquin Valley Air Pollution Control District

RECEIVED

Jan 8 2015

SJVAPCD
Southern Region

Permit Application For:

ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: SAN JOAQUIN REFINING COMPANY, INC.		
2. MAILING ADDRESS: STREET/P.O. BOX: <u>3542 SHELL STREET</u> CITY: <u>BAKERSFIELD</u> STATE: <u>CA.</u> 9-DIGIT ZIP CODE: <u>93308</u>		
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <u>SAME</u> CITY: _____ _____ 1/4 SECTION _____ TOWNSHIP _____ RANGE _____		INSTALLATION DATE: <u>12/09/14</u>
4. GENERAL NATURE OF BUSINESS: <u>OIL REFINING</u>		
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) <p style="text-align: center;">ATC-S-36-37-15</p>		
6. TYPE OR PRINT NAME OF APPLICANT: <u>DAVID G. CAMPBELL</u>		TITLE OF APPLICANT: <u>ENVIRONMENTAL MANAGER</u>
7. SIGNATURE OF APPLICANT: 	DATE: <u>12/09/14</u>	PHONE: <u>(661) 852-2504</u> FAX: <u>(661) 327-2150</u> EMAIL: <u>DAVIDC@SJR.COM</u>

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____ DATE PAID: _____ PROJECT NO: <u>S-1150490</u> FACILITY ID: <u>S-30</u>
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AUTHORITY TO CONSTRUCT

PERMIT NO: S-36-37-15

ISSUANCE DATE: 11/18/2014

LEGAL OWNER OR OPERATOR: SAN JOAQUIN REFINING COMPANY

MAILING ADDRESS: PO BOX 5576
BAKERSFIELD, CA 93388

LOCATION: STANDARD AND SHELL ST
BAKERSFIELD, CA 93308

SECTION: 24 **TOWNSHIP:** 29S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF LUBE OIL FINISHING PLANT WITH 16.5 MMBTU/HR NATURAL GAS-FIRED NATURAL DRAFT EXTRACT HEATER LH-1, 12.6 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-2 WITH FGR, 12.0 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-3 WITH LOW NOX BURNERS AND FGR, ABSORBER T-1, TREATING TOWER T-2, EXTRACT DRYER T-5/T-6, MP FLASH DRUM D-5, EXPANSION DRUM D-9, BLOWDOWN DRUM D-7, AND SETTLER D-1: AUTHORIZE USE OF FIELD GAS AS FUEL IN HEATERS LH-1 AND LH-2

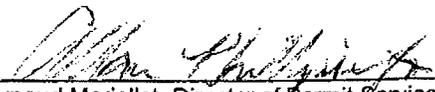
CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 2149 lb, 2nd quarter - 2149 lb, 3rd quarter - 2149 lb, and fourth quarter - 2149 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
3. ERC Certificate Numbers C-1317-2, S-1253-2, S-1509-2, S-1735-2, S-2537-2, and S-2539-2 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 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.

ayed Sadredin, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services

S-36-37-15 - Nov 18 2014 2:04PM - DAVIDSOS : Joint Inspection NOT Required

5. The duration of each startup and shutdown period for the 16.5 MMBtu/hr heater LH-1 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
6. The duration of each startup and shutdown period for the 12.6 MMBtu/hr heater LH-2 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
7. 12.0 MMBtu/hr heater LH-3 shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Absorber T-1 overhead condensibles shall be transported in a closed system to a closed oil/water separation operation to prevent emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Solvent dry tanks shall be closed and equipped with operational conservation pressure relief valves or connected to an approved vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
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11. Carbon canister vapor collection system serving Absorber T-1 and Nash vacuum system shall be maintained with a minimum of two (2) carbon canisters connected in series, except during change-out of spent canister(s). [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall monitor daily for VOC concentration of gas between the carbon canisters and at the discharge of the final carbon canister. [District NSR Rule] Federally Enforceable Through Title V Permit
13. VOC concentration at exhaust outlet for carbon canister system shall not exceed 134 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Vapor flow rate to carbon canister system shall not exceed 480 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Carbon canisters shall be replaced whenever effluent gas VOC concentration exceeds 134 ppmv at outlet. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Carbon canister vapor control system shall be maintained leak-free (less than 10,000 ppmv @ 1 cm from source) [District NSR Rule] Federally Enforceable Through Title V Permit
17. Nash vacuum system vapors and Absorber T-1 overhead vapors shall be monitored continuously for H₂S at the carbon canister system exhaust point, with alarm set at 1 ppmv - H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
18. H₂S emissions from first stage and second stage carbon canisters shall be tested daily, and shall be replaced as required to ensure exhaust to atmosphere does not exceed 1 ppmv-H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Carbon canisters shall be serviced in a manner preventing the release of VOCs into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 6.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
21. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Upon shutdown, vessels containing VOC's shall be controlled per Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
23. Spent, used or contaminated solvent shall not be stored in tanks or containers not connected to an approved vapor control system nor disposed of by introduction into the oily water sewer system. [District NSR Rule and Rule 4102] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Emissions from 16.5 MMBtu/hr heater LH-1 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
25. Emissions from 12.6 MMBtu/hr heater LH-2 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂; or SO_x: 0.00285 lb-SOX/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
26. Emissions from 12.0 MMBtu/hr heater LH-3 shall not exceed any of the following: PM₁₀: 0.004 lb/MMBtu; VOC: 0.01 lb/MMBtu; NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
27. Source testing for 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, 4306, and 4351] Federally Enforceable Through Title V Permit
28. If permittee fails any source test for NO_x and CO emissions 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, 4306, and 4351] Federally Enforceable Through Title V Permit
29. 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, 4306, and 4351] Federally Enforceable Through Title V Permit
30. 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
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
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
33. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
34. Records of VOC measurements taken between the carbon canisters and at the discharge of the last carbon canister shall be maintained for a period of at least two (2) years, and made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
35. Permittee shall operate heater LH-1 as intended by manufacturer to maintain compliance with NO_x and CO emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
36. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of heaters LH-1, LH-2, and LH-3 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
37. If either the NO_x (as NO₂) or CO concentrations corrected to 3% O₂ of heaters LH-1, LH-2, and LH-3, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements on heaters LH-1, LH-2, and LH-3, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
40. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit
41. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
42. 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, 9.4.2] Federally Enforceable Through Title V Permit
43. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
44. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
45. 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
46. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
47. When complying with SOx 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, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FFD/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
48. If the unit is fired on noncertified gaseous fuel and compliance with SOx 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-FFD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
 - . 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

CONDITIONS CONTINUE ON NEXT PAGE

50. 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
51. 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 NO2/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2; 4306, 8.1; and/or 4351, 8.1] Federally Enforceable Through Title V Permit
52. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 3.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
53. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere except during breakdown conditions. [District NSR Rule] Federally Enforceable Through Title V Permit
54. Emissions for the LH-1, LH-2, and LH-3 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 1081] Federally Enforceable Through Title V Permit
55. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
- The following conditions must be met for representative unit(s) to be used to test for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
57. All units in a group for which representative units are source for NOx 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 each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
58. All units in a group for which representative units are source tested for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
59. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rule 4801, section 3.1 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
62. Nitrogen oxide (NOx) emissions for each heater shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
63. Pursuant to Rule 4320, beginning in 2010 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]

ATTACHMENT E

Previous Title V Operating Permit
S-36-37-13

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-36-37-13

EXPIRATION DATE: 08/31/2016

SECTION: 24 TOWNSHIP: 29S RANGE: 27E

EQUIPMENT DESCRIPTION:

LUBE OIL FINISHING PLANT WITH 16.5 MMBTU/HR NATURAL GAS-FIRED NATURAL DRAFT EXTRACT HEATER LH-1, 12.6 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-2 WITH FGR, 12.0 MMBTU/HR NATURAL GAS-FIRED FORCED DRAFT HOT OIL HEATER LH-3 WITH LOW NOX BURNERS AND FGR, ABSORBER T-1, TREATING TOWER T-2, EXTRACT DRYER T-5/T-6, MP FLASH DRUM D-5, EXPANSION DRUM D-9, BLOWDOWN DRUM D-7, AND SETTLER D-1

PERMIT UNIT REQUIREMENTS

1. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
2. The duration of each startup and shutdown period for the 16.5 MMBtu/hr heater LH-1 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period for the 12.6 MMBtu/hr heater LH-2 shall not exceed 6.5 hours and 2.0 hours respectively. Emission limits of Rule 4305 and 4306 are waived during periods of startup and shutdown. [District Rule 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
4. Heaters shall be fired exclusively on PUC quality natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Absorber T-1 overhead condensibles shall be transported in a closed system to a closed oil/water separation operation to prevent emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Solvent dry tanks shall be closed and equipped with operational conservation pressure relief valves or connected to an approved vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Nash vacuum pump system vapors and Absorber T-1 overhead vapors shall be vented exclusively to activated carbon canister vapor control system. [District NSR Rule and 4453] Federally Enforceable Through Title V Permit
8. Carbon canister vapor collection system serving Absorber T-1 and Nash vacuum system shall be maintained with a minimum of two (2) carbon canisters connected in series, except during change-out of spent canister(s). [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall monitor daily for VOC concentration of gas between the carbon canisters and at the discharge of the final carbon canister. [District NSR Rule] Federally Enforceable Through Title V Permit
10. VOC concentration at exhaust outlet for carbon canister system shall not exceed 134 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Vapor flow rate to carbon canister system shall not exceed 480 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Carbon canisters shall be replaced whenever effluent gas VOC concentration exceeds 134 ppmv at outlet. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Carbon canister vapor control system shall be maintained leak-free (less than 10,000 ppmv @ 1 cm from source) [District NSR Rule] Federally Enforceable Through Title V Permit
14. Nash vacuum system vapors and Absorber T-1 overhead vapors shall be monitored continuously for H₂S at the carbon canister system exhaust point, with alarm set at 1 ppmv - H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
15. H₂S emissions from first stage and second stage carbon canisters shall be tested daily, and shall be replaced as required to ensure exhaust to atmosphere does not exceed 1 ppmv-H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Carbon canisters shall be serviced in a manner preventing the release of VOCs into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 6.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Upon shutdown, vessels containing VOC's shall be controlled per Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
20. Spent, used or contaminated solvent shall not be stored in tanks or containers not connected to an approved vapor control system nor disposed of by introduction into the oily water sewer system. [District NSR Rule and Rule 4102] Federally Enforceable Through Title V Permit
21. Emissions from 16.5 MMBtu/hr heater LH-1 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
22. Emissions from 12.6 MMBtu/hr heater LH-2 shall not exceed any of the following: NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
23. Emissions from 12.0 MMBtu/hr heater LH-3 shall not exceed any of the following: PM₁₀: 0.004 lb/MMBtu; VOC: 0.01 lb/MMBtu; NO_x (as NO₂) - 30 ppmv @ 3% O₂ or 0.036 lb/MMBtu; or CO - 400 ppmv @ 3% O₂. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
24. Source testing for NO_x and CO emissions shall be conducted within 60 days of startup, and not less than once every 12 months, except as provided below. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
25. Source testing for 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, 4306, and 4351] Federally Enforceable Through Title V Permit
26. If permittee fails any source test for NO_x and CO emissions 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, 4306, and 4351] Federally Enforceable Through Title V Permit
27. 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, 4306, and 4351] Federally Enforceable Through Title V Permit
28. 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
29. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

30. 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
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, 4306, and 4351] Federally Enforceable Through Title V Permit
32. Records of VOC measurements taken between the carbon canisters and at the discharge of the last carbon canister shall be maintained for a period of at least two (2) years, and made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
33. Permittee shall operate heater LH-1 as intended by manufacturer to maintain compliance with NO_x and CO emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ of heaters LH-1, LH-2, and LH-3 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
35. If either the NO_x (as NO₂) or CO concentrations corrected to 3% O₂ of heaters LH-1, LH-2, and LH-3, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements on heaters LH-1, LH-2, and LH-3, (2) the O₂ concentration in percent by volume 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, 4306, and 4351] Federally Enforceable Through Title V Permit
38. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit
39. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
40. 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, 9.4.2] Federally Enforceable Through Title V Permit
41. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

42. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
43. 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
44. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
45. 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, 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
46. 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
47. 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
48. 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
49. 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 averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2; 4306, 8.1; and/or 4351, 8.1] Federally Enforceable Through Title V Permit
50. Combined VOC emission rate from combustion equipment and fugitive sources shall not exceed 3.5 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
51. No vessels, lines, or pressure relief valves shall be designed to vent to atmosphere except during breakdown conditions. [District NSR Rule] Federally Enforceable Through Title V Permit
52. Emissions for the LH-1, LH-2, and LH-3 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 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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53. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
54. The following conditions must be met for representative unit(s) to be used to test for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
55. All units in a group for which representative units are source for NOx 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 each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
56. All units in a group for which representative units are source tested for NOx 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, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
57. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 4305, 6.3.2; 4306, 6.3.2; and 4351, 6.3] Federally Enforceable Through Title V Permit
58. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rule 4801, section 3.1 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
60. Nitrogen oxide (NOx) emissions for each heater shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

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