San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JUN 0 5 2017

Mr. John Haley
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389

Re: Notice of Final Action - Title V Permit Renewal
District Facility # S-1547
Project # 1154148

Dear Mr. Haley:

The District has issued the Final Renewed Title V Permit for Aera Energy LLC (see enclosure). The preliminary decision for this project was made on April 14, 2017. No comments were received subsequent to the District preliminary decision.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

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

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
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)
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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

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Facility # S-1547
AERA ENERGY LLC
PO BOX 11164
BAKERSFIELD, CA 93389-1164

Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:	(209) 557-6446
Fresno:	(559) 230-5888
Bakersfield:	(661) 392-5665

*Failure to comply with the permit unit requirements may result in enforcement action.

Permit to Operate

FACILITY: S-1547 **EXPIRATION DATE:** 05/31/2022

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

FACILITY DESCRIPTION: CRUDE PETROLEUM AND NATURAL GAS

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

Jun 1 2017 4:54PM – GOMEZD

San Joaquin Valley
Air Pollution Control District

FACILITY: S-1547-0-4 **EXPIRATION DATE:** 05/31/2022

FACILITY-WIDE REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
2. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1] Federally Enforceable Through Title V Permit
5. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
7. Compliance demonstration (source testing) shall be by District witnessed, or authorized. Sample collection shall be by an ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
8. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
9. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
10. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 an] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

11. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit

12. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit

13. The operator shall maintain records of required monitoring, where applicable, that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

14. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

16. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with District Rule 2520. [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

17. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

18. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

19. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

20. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

21. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

22. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

23. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

24. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

25. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

26. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

27. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating not exempt as allowed by Sections 4.1 and 4.2 of Rule 4601 with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

28. All VOC-containing materials for architectural coatings subject to Rule 4601 shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

29. The permittee shall comply with all the Labeling and Test Method requirements outlined in Rule 4601. [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

30. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13 and 10.0] Federally Enforceable Through Title V Permit

31. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

32. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

33. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021(8/19/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

34. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under section 4 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit

35. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit

36. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit

37. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

38. Any unpaved vehicle/equipment traffic area that anticipates more than 50 or more Average Annual Daily Trips(AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment traffic area that anticipates 150 vehicle daily trips (VDT), or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

39. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

40. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

41. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

42. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

43. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Kern County Rules 111 and 401. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

44. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92);2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4201 (12/17/92); 4301 (12/17/92); 4406 (12/17/92); 4601, section 5.0, 6.0 and 7.0 (12/17/09); 4801 (12/17/92); 8021 (08/19/04); 8031 (08/19/04); 8041 (08/1904); 8051 (08/19/04); 8061 (08/19/04); 8071 (08/19/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

45. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan by June 21, 1999 and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68] Federally Enforceable Through Title V Permit

46. Facilities S-1135 and S-1547 constitute one stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

47. The permittee shall submit a Stationary Source Curtailment Plan and/or a Traffic Abatement Plan, pursuant to District Rule 6130 (as amended December 17, 1992) within 45 days to the APCO upon request. [District Rule 6130, 3.1] Federally Enforceable Through Title V Permit

48. STEAM GENERATOR FUEL MONITORING CONDITION: For units equipped with post-combustion SO2 control equipment (e.g. SO2 scrubber), annual source testing shall be performed to measure SO2 concentration in the exhaust or SO2 control efficiency using EPA Methods 6, 6C, 8 or ARB Method 100. SOx control efficiency determination shall follow procedure in Section 6.2.8 of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

49. STEAM GENERATOR FUEL MONITORING CONDITION: For units not equipped with post-combustion SO2 control equipment (e.g. SO2 scrubber), each fuel source shall be tested for sulfur annually using ASTM D 1072, D 3031, D 4084, or D 3246, D 6228, D 5504, EPA Method 11 or 15, or grab sample analysis by double GC for H2S and mercaptans. [District Rule 4320] Federally Enforceable Through Title V Permit

50. STEAM GENERATOR GENERAL CONDITION: Duration of startup and shutdown (as defined in Rule 4320) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

51. STEAM GENERATOR GENERAL CONDITION: Emission rates during startup, shutdown, and refractory curing shall not exceed any of the following: particulate matter - 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan ; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, and 4] Federally Enforceable Through Title V Permit

52. STEAM GENERATOR PERIODIC MONITORING CONDITION: The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. If the unit is equipped with flue gas recirculation (FGR), measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

53. STEAM GENERATOR PERIODIC MONITORING CONDITIONS: If the NOX and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

54. STEAM GENERATOR PERIODIC MONITORING CONDITION: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

55. STEAM GENERATOR PERIODIC MONITORING CONDITION: The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

56. STEAM GENERATOR PERIODIC MONITORING CONDITION: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

57. STEAM GENERATOR SOURCE TESTING CONDITION: The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

58. STEAM GENERATOR SOURCE TESTING CONDITION: 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

59. STEAM GENERATOR SOURCE TESTING CONDITION: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

60. STEAM GENERATOR SOURCE TESTING CONDITION: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

61. STEAM GENERATOR SOURCE TESTING CONDITION: Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

62. STEAM GENERATOR GENERAL CONDITION: If the unit is equipped with flue gas recirculation (FGR), whenever the unit is switched to operate with the FGR system in the closed position, compliance source testing for NOx and CO shall be conducted within 60 days of cessation of FGR operation date unless source testing with FGR system in the closed position has occurred within the previous 36 months. [District Rule 1070] Federally Enforceable Through Title V Permit

63. TEOR SYSTEM CONDITION: The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit

64. TEOR SYSTEM CONDITION: The fugitive emissions component inspection and reinspection requirements of Section 5.4.1 through Section 5.4.7 5.4.6 of this rule shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight or less (£10 wt.%), as determined by the test methods in Section 6.3.4. [District Rule 4401] Federally Enforceable Through Title V Permit

65. TEOR SYSTEM CONDITION: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the requirements of District Rule 4401. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit

66. TEOR SYSTEM CONDITION: An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: 1) The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emission to atmosphere, or 2) the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

67. TEOR SYSTEM CONDITION: There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

68. TEOR SYSTEM CONDITION: An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401, 5.2] Federally Enforceable Through Title V Permit

69. TEOR SYSTEM CONDITION: No leaking components (as defined in Section 5.2.2 of Rule 4401) may be used unless they have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit

70. TEOR SYSTEM CONDITION: Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year. [District Rule 4401, 5.4.1] Federally Enforceable Through Title V Permit

71. TEOR SYSTEM CONDITION: An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this Rule. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit

72. TEOR SYSTEM CONDITION: An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. 2) Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this Rule. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit

73. TEOR SYSTEM CONDITION: The operator shall also perform the following inspections: 1) An operator shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) Except for PRDs subject to the requirements of Section 5.4.4.1 of this Rule, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit

74. TEOR SYSTEM CONDITION: Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit

75. TEOR SYSTEM CONDITION: Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

76. TEOR SYSTEM CONDITION: The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit

77. TEOR SYSTEM CONDITION: An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit

78. TEOR SYSTEM CONDITION: Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit

79. TEOR SYSTEM CONDITION: The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit

80. TEOR SYSTEM CONDITION: The time of the initial leak detection shall be the start of the repair period specified in Table 3. [District Rule 4401, 5.5.6] Federally Enforceable Through Title V Permit

81. TEOR SYSTEM CONDITION: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit

82. TEOR SYSTEM CONDITION: The operator of any steam-enhanced crude oil production well shall maintain records of 1) the date and well identification where steam injection or well stimulation occurs; and 2) a listing of all steam enhanced wells connected to this system (updated annually within 60 days of permit anniversary). [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

83. TEOR SYSTEM CONDITION: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit

84. TEOR SYSTEM CONDITION: The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.6 & 6.5] Federally Enforceable Through Title V Permit

85. TEOR SYSTEM CONDITION: Each hatch shall be closed at all times except during attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage or material and VOC emissions into the atmosphere. [] Federally Enforced Through Title V Permit [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit

86. TEOR SYSTEM CONDITION: By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit

87. TEOR SYSTEM CONDITION: Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.7] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

88. TEOR SYSTEM CONDITION: An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit

89. TEOR SYSTEM CONDITION: An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, and internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit

90. TEOR SYSTEM CONDITION: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit

91. TEOR SYSTEM CONDITION: VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit

92. TEOR SYSTEM CONDITION: Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit

93. TEOR SYSTEM CONDITION: The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit

94. TEOR SYSTEM CONDITION: The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in this Rule, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1-40 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU.HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER FLUE GAS RECIRCULATION AND SO2 SCRUBBER SHARED WITH S-1547-3, (#25 DIS# 19951-74) (ANDERSON-FITZGERALD DEHY)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District NSR Rule] Federally Enforceable Through Title V Permit

13. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District NSR Rule] Federally Enforceable Through Title V Permit

15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit

17. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit

18. Emission rates shall not exceed any of the following: PM10: 111.0 lb/day, SOx (as SO2): 7.5 lb/day, VOC: 10.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

19. 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

20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-3-35 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN ULN BURNER, A FLUE GAS RECIRCULATION (FGR) SYSTEM, AND A SO2 SCRUBBER SHARED WITH S-1547-1, (#26 DIS# 19952-75) (ANDERSON/FITZGERALD DEHY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
6. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

11. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-7-34 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN 3.2 LOW NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#12-2L, DIS# 19960-74)

PERMIT UNIT REQUIREMENTS

1. This steam generator is approved to operate at the following locations: NW/4 Section 12, T29S, R21E and Section 34, T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor H2S content of the gas prior to incineration in affected steam generators on a daily basis. If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 19.3 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 4305, 5.1and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-10-27 **EXPIRATION DATE:** 05/31/2022

SECTION: 34 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (#33, DIS# 19964-74)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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
7. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Natural gas fuel sulfur content shall not exceed 19.3 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Emission rates shall not exceed any of the following: PM10: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit

12. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit

13. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

14. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

15. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

16. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

17. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

19. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

22. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

23. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

24. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

25. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

26. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

28. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit

29. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-12-26 **EXPIRATION DATE:** 05/31/2022

SECTION: 28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #35 DIS # 20602-76 WITH FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with O2 controller and excess O2 shall be maintained between 0.5 and 3.0%. [District Rule 4305] Federally Enforceable Through Title V Permit
5. Staged combustion shall be removed or rendered inoperable. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Only PUC-quality natural gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rule 2201 and Rule 4305]
8. The steam generator shall be equipped with an FGR valve positioning indicator. [District Rule 4305] Federally Enforceable Through Title V Permit
9. Except during periods of steam generator startup/shutdown, steam generator shall not be operated unless flue gas recirculation system is operating. [District Rule 4305] Federally Enforceable Through Title V Permit
10. Steam generator may be equipped with a programmable logic controller (PLC). [District Rule 4305] Federally Enforceable Through Title V Permit
11. The acceptable range of flue gas recirculation (FGR) valve settings shall be established by testing emissions from this or other representative unit(s) as approved by the District. The acceptable maximum and minimum FGR valve settings shall be the settings with which compliance with applicable NOx and CO emission rates have been demonstrated through District approved source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
12. The acceptable range of FGR valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the flue gas recirculation valve setting deviates from the acceptable range, the permittee shall notify the District and take corrective action within one (1) hour after detection. If the flue gas recirculation valve settings are not corrected promptly, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emissions limits at the observed flue gas recirculation valve setting. [District Rule 4305] Federally Enforceable Through Title V Permit

14. Permittee shall record the FGR valve position and date and time when the FGR valve position was checked on a weekly basis. Permittee shall record any corrective action taken to maintain the FGR setting within the acceptable range. Permittee shall maintain records of date and duration of each startup and each shut down. Records shall be retained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

15. Compliance source testing shall be conducted under conditions representative of normal operation except during establishment of acceptable minimum and maximum FGR valve settings. [District Rule 1081] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

17. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

22. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

23. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

24. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

27. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-13-27 **EXPIRATION DATE:** 05/31/2022

SECTION: 28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (MAXWELL #36 (NORTH MIDWAY), DIS #20604-76)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This generator is permitted to operate at the following locations: NE 1/4 Section 27 of Township 31S, Range 22E and Section 28 of Township 28S, Range 21E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-16-30 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN GLE ULTRA LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#12-2M, DIS# 20625-76)

PERMIT UNIT REQUIREMENTS

1. This steam generator is approved to operate at the following locations: NW/4 Section 12, T29S, R21E and Section 34, T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor H2S content of the gas prior to incineration in affected steam generators on a daily basis. If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 19.3 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-17-38 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION (MOCO #707, SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Natural gas combusted in this unit shall consist primarily of methane and contain less than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 19.3 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.004 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201,4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 6.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-22-34 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-II LOW-NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION (#12-2E DIS# 21944-76)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 2.8 gr/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.008 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 12.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
10. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-23-26 **EXPIRATION DATE:** 05/31/2022

SECTION: 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR #46 DIS# 21943-77

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010]
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2 [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit
5. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
7. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

15. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

16. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-24-29 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#47, DIS# 21944-77)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this steam generator are: NE12 T30S R21E (Calso Lease) and Sec. 33 T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Natural gas fuel sulfur content shall not exceed 5.0 gr S/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-26-22 **EXPIRATION DATE:** 05/31/2022

SECTION: 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR #49 DIS# 21946-77 WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emission rates from this unit shall not exceed any of the following limits: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu (as SO2), NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rules 2201and 4305] Federally Enforceable Through Title V Permit
5. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
8. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

15. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

17. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-40-31 **EXPIRATION DATE:** 05/31/2022

SECTION: 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR WITH O2 CONTROLLER (#51, DIS# 21904-78)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the 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
6. 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
7. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2; and 4306, 6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. Natural gas fuel sulfur content shall not exceed 19.3 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Emission rates shall not exceed any of the following: PM10: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

12. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

13. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

14. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

15. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

16. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

17. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

19. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

22. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

23. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

24. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

25. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

26. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1; 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit

27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

28. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201, 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-47-22 **EXPIRATION DATE:** 05/31/2022

SECTION: 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #52 DIS# 21832-78 WITH O2 CONTROLLER AND ANDERSON 2000 SOX SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.035 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2; or CO: 25.8 ppmv @3% O2. [District Rule 2201 and District Rule 4305, 5.1] Federally Enforceable Through Title V Permit
5. SOx scrubber shall be utilized whenever vapor recovery gas is burned in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber SO2 control efficiency shall be maintained at no less than 95%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. No less than 0.5 miles of roadway shall be paved and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070] Federally Enforceable Through Title V Permit
12. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

14. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

17. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

18. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

19. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

20. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
23. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-57-19 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (#70 DIS# 27452-81) WITH C.E. NATCO SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. (Adjust as necessary) [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. SOx scrubber shall be utilized whenever vapor recovery gas is burned in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201]
6. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this unit shall not exceed any of the following: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rules 2201and 4305, 5.1] Federally Enforceable Through Title V Permit
8. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

16. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

17. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

18. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-58-19 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (#71 DIS# 27453-81) WITH C.E. NATCO SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. SOx scrubber shall be utilized whenever vapor recovery gas is burned in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201]
6. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this unit shall not exceed any of the following: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit
8. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

16. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

17. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

18. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-59-31 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION AND SO2 SCRUBBER (#72 DIS# 27454-81)

PERMIT UNIT REQUIREMENTS

1. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor H2S content of the gas prior to incineration in affected steam generators on a daily basis. If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 4301, 5.2 and 4801, 3.1] Federally Enforceable Through Title V Permit
3. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; 4306 and 4] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District NSR Rule] Federally Enforceable Through Title V Permit
9. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District NSR Rule] Federally Enforceable Through Title V Permit

11. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit

13. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC-quality natural gas (as defined by Rule 4320). [District Rule 4320] Federally Enforceable Through Title V Permit

14. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320] Federally Enforceable Through Title V Permit

15. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit

16. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit

17. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 94.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-60-30 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN 3.2 LOW NOX BURNER, FLUE GAS RECIRCULATION, AND SO2 SCRUBBER (#73 DIS# 28624-82)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 4301, 5.2 and 4801, 3.1] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
7. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
8. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber liquid pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC-quality natural gas (as defined by Rule 4320). [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permitteee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320] Federally Enforceable Through Title V Permit

13. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit.

15. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 94.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-61-26 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION AND SO2 SCRUBBER (#74 DIS# 28625-82)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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
6. 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 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit

13. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

14. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Emission rates shall not exceed any of the following: PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit

18. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

19. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

20. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

21. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

22. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305, 6.1] Federally Enforceable Through Title V Permit

23. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

25. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

26. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

29. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

30. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

31. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 4305, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input , make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305,6.3] Federally Enforceable Through Title V Permit

33. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

34. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

35. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

36. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

37. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, and 4305, 6.2] Federally Enforceable Through Title V Permit

38. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-62-34 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#12-2C, DIS# 19175-75)

PERMIT UNIT REQUIREMENTS

1. This equipment is approved to be operated at the following locations: Section 18, T28S/R21E and NW/4 Section 12, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 5.0 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-65-30 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN BURNER AND FLUE GAS RECIRCULATION (#12-2A, DIS# 21841-78)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This equipment is approved to be operated at the following locations: Section 18, T28S/R21E and NW/4 Section 12, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 19.3 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-66-29 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR [#12-2B, DIS# 22467-79) WITH A COEN QLN-ULN AND WITH FLUE GAS RECIRCULATION (FGR)

PERMIT UNIT REQUIREMENTS

1. This equipment is approved to be operated at the following locations: Section 18, T28S/R21E and NW/4 Section 12, T29S/R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 19.3 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.055 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 82.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-67-26 **EXPIRATION DATE:** 05/31/2022

SECTION: 34 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR #82 DIS# 27573-81 WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rule 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit
5. No less than 0.8 miles of roadway shall be paved and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
9. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
15. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
16. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit
17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
18. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-68-23 **EXPIRATION DATE:** 05/31/2022

SECTION: 34 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR #83 DIS# 27485-81 WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit
5. No less than 0.8 miles of roadway shall be paved and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
9. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
15. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
16. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit
17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
18. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-70-26 **EXPIRATION DATE:** 05/31/2022

SECTION: 28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION, AUTHORIZED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#85, DIS# 28605-82)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the 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
6. 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
7. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. This requirement shall not supersede a more stringent NSR or PSD permit testing requirement. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

11. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input , make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305,6.3.2] Federally Enforceable Through Title V Permit

12. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

13. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

14. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

16. Approved locations for this steam generator are: Sec. 28 T28S R21E and SE26 T29S R21E. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rule 2201 and Rule 4305] Federally Enforceable Through Title V Permit

20. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit

21. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

23. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

25. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

26. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit

27. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit

28. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit

29. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

30. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit

32. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-74-34 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR #12-2F (DIS # 21938-76 EQUIPPED WITH A COEN QLN-ULN BURNER

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Not less than 0.5 miles of roadway shall be paved and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-76-29 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION AND SO2 SCRUBBER, AUTHORIZED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS, (#87, DIS# 27469-80)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
6. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
7. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
8. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Approved locations for this steam generator are SE33 T28S R21E (gen. site 3346 or 3356), NW01 T28S R20E (gen. site 121), NW34 T28S R21E and NE34 T28S R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Scrubber shall be utilized whenever vapor recovery gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070] Federally Enforceable Through Title V Permit
15. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
16. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Emission rates shall not exceed any of the following: PM10: 0.0138 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 47.5 ppmv @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
21. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
22. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
23. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
25. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
28. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, and Source Testing Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-79-17 **EXPIRATION DATE:** 05/31/2022

SECTION: SE28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#90, DIS# 27450-80) WITH O2 CONTROLLER (GEN SITE 2868).

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from this unit shall not exceed any of the following: NOx (as NO2): 30 ppmv @3% O2; or CO: 400 ppmv @3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
8. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

15. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

17. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-86-38 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (#12-2D DIS# 21828-78)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. No less than 3.0 miles of roadway shall be paved and properly maintained with hot mix asphalt material at South Belridge field on Poleline Road from the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-87-26 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#98, DIS #27459-80)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Approved locations for this steam generator are: NE, NW, SE, SW 1/4 Section 34, T28S, R21E; SE 1/4 Section 26, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Emissions from gaseous fired units shall not exceed 200 lb sulfur compounds/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 Rules 4301, 5.2.1, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. 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, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rules 2520, 9.3.2, 4305 an d4306] Federally Enforceable Through Title V Permit

11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2 and 4305, 6.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

14. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

15. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

16. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

17. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

19. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit

22. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

23. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

24. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

25. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

26. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

27. Duration of startup and shutdown (as defined in Rule 4305) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 5.5, & 6.1 and 4306, 5.3 & 6.1] Federally Enforceable Through Title V Permit

28. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

29. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 6.1; 4305, 6.2, and 4306, 6.2] Federally Enforceable Through Title V Permit

30. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-92-32 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR WITH A GIDEON MODEL MGW-63V2 ULTRA LOW NOX BURNER, O2 CONTROLLER AND FLUE GAS RECIRCULATION (DIS# 27580-80) (12-2G)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District NSR Rule, 2520, 4301, 4406, 4801 and Kern] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4201, 4301, 4305, 4306, 4] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.7 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-95-27 **EXPIRATION DATE:** 05/31/2022

SECTION: NE33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH A COEN MODEL ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (#106, DIS# 27583-80) (GEN SITE 3363)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Copies of all fuel invoices showing quantity and delivery points of supplier-certified gas delivered and copies of quality terms of supplier-certified gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. 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
9. 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 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rules 4305, 6.2, and 4306, 6.2] Federally Enforceable Through Title V Permit

11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2; and 4306, 6.2] Federally Enforceable Through Title V Permit

12. Duration of startup and shutdown (as defined in Rule 4306) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 5.5, & 6.1 and 4306, 5.3 & 6.1] Federally Enforceable Through Title V Permit

13. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.007 lb/MMBtu, SOx (as SO2): 0.009 lb/MMBtu, VOC: 0.007 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

15. Emission rates during refractory curing shall not exceed: particulate matter - 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4301, 5.2; 4405, 5.2; 4406, 4.2 and 4801, 3.1] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. 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, 5.4 and 4306, 5.5] Federally Enforceable Through Title V Permit

17. If the NOX and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

18. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

20. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

21. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

22. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

23. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit

24. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit

26. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4.0; 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit

27. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-114-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN BURNER, O2 CONTROLLER AND FLUE GAS RECIRCULATION, (MOCO #708 (SOUTH MIDWAY), DIS# 27477-81)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Natural gas combusted in this unit shall consist primarily of methane and contain less than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rules 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.004 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 6.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-116-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #123 DIS # 27577-81 WITH FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. 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
8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rules 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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 Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

10. 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

11. Nitrogen oxide (NOx) emissions 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

12. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

13. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

14. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

15. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

16. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

18. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 47.5 ppmv @ 3% O2. [District NSR Rule and Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
21. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
22. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
23. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
24. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
25. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
26. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
27. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
28. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
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 NOx and CO source testing requirement. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
30. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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
32. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351] Federally Enforceable Through Title V Permit
33. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-117-16 **EXPIRATION DATE:** 05/31/2022

SECTION: SW34 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#122, DIS# 27576-81) WITH O2 CONTROLLER (GEN SITE 3428)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: NOx (as NO2): 30 ppmv @3% O2; or CO: 400 ppmv @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
5. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
8. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

15. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

17. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-119-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SW28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#120, DIS# 27574-81) WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. (Adjust as necessary) [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This unit is approved to operate at the following locations: SW28-T28S-R21E, NE35-27S-20E, and S7-T28S-R21E [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. NOx emissions from this unit shall not exceed any of the following: NOx (as NO2): 30 ppmv @3% O2, or 400 ppmv CO @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
8. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

16. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

17. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

18. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-120-18 **EXPIRATION DATE:** 05/31/2022

SECTION: SW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#147, DIS# 27484-81) WITH O2 CONTROLLER (GEN SITE 121).

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from this unit shall not exceed any of the following: NOx (as NO2): 30 ppmv @3% O2; or CO: 400 ppmv @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
8. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4305. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

15. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

17. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-121-30 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#131, DIS# 28722-83) (CALSO)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this steam generator are: Sec. 12 T30S R21E, Sec. 07 T30S R21E, and Sec 20, T28S, R21E . [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4305, 5.1and 4306, 5.1] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-122-30 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#132, DIS# 28714-83) (CALSO LEASE)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this location are: Sec. 12 T30S R21E, Sec. 13 T30S R21E, Sec 20, T28S, R21E . [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-123-36 **EXPIRATION DATE:** 05/31/2022

SECTION: NE29 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM (#133, DIS# 28715-83) (GEN SITE 2972)

PERMIT UNIT REQUIREMENTS

1. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
7. This generator is approved to operate at the following locations: NE Section 29, T28S, R21E; SW Section 20, T28S, R21E; and, NW Section 30, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 4301, 5.2.1 and 4801, 3.1] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC-quality natural gas (as defined by Rule 4320). [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permitteee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320] Federally Enforceable Through Title V Permit

13. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1; 4306 and, 5.1 and] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 7,665 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-125-30 **EXPIRATION DATE:** 05/31/2022

SECTION: NW01 **TOWNSHIP:** 28S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN 3.2 BURNER AND FLUE GAS RECIRCULATION (#135, DIS# 28717-83) (GEN SITE 121)

PERMIT UNIT REQUIREMENTS

1. Pursuant to Rule 4320, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
2. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 4301, 5.2.1 and 4801, 3.1] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. No less than 3.0 miles of roads shall be paved and properly maintained with hot mix asphalt material at permittee's South Belridge field on Poleline Road - From the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
8. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.014 lb/MMBtu or 12 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1; 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 7,665 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-126-24 **EXPIRATION DATE:** 05/31/2022

SECTION: NE12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (#12-2J, DIS# 28708-83)

PERMIT UNIT REQUIREMENTS

1. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by methods specified in this permit. [District Rule 2520, 9.4.2; 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rules 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.7 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-127-26 **EXPIRATION DATE:** 05/31/2022

SECTION: NE34 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR, WITH A COEN QLN ULN 3.2 BURNER, O2 CONTROLLER, FLUE GAS RECIRCULATION (#12-2K, DIS# 28709-83)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 0.75 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, SOx (as SO2): 0.0214 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201,4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor H2S content of the gas prior to incineration in affected steam generators on a daily basis. If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-128-26 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION, (MOCO #706 (SOUTH MIDWAY), DIS# 28710-83)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Only PUC quality dry gas shall be utilized as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Natural gas combusted in this unit shall consist primarily of methane and contain less than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rules 2201, 2520, 4301, 4406, 4801] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.004 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 6.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-130-20 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
DORMANT EMISSIONS UNIT: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#119, DIS# 28636-82)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. 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
8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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 Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

10. 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

11. Nitrogen oxide (NOx) emissions 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

12. 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), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

15. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

16. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

17. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

18. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit
21. Approved locations for this equipment: Section 35 (SW quarter), T28S, R21E; and Section 26 (SE quarter), T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Emission rates shall not exceed any of the following: NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, or CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
25. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
26. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
27. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
28. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
29. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
30. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
31. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
32. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit
33. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

36. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit

37. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-134-22 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS, (#167, DIS# 28638-82)

PERMIT UNIT REQUIREMENTS

1. This steam generator is authorized to operate at multiple locations: NE 1/4 Sec 13, T28S, R21E and Anderson-Fitzgerald Lease SE 1/4 Sec 26, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rules 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1.] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-139-23 **EXPIRATION DATE:** 05/31/2022

SECTION: NW12 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION, AND O2 CONTROLLER (12-2H, DIS# 28643-82)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rules 2201, 2520, 4301, 4406, 4801 and Ke] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, SOx (as SO2): 0.00314 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.7 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-141-32 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN ULTRA LOW NOX BURNER, AN O2 CONTROLLER, FLUE GAS RECIRCULATION (FGR) SYSTEM, AND AIR POL SO2 SCRUBBER, (#126 DIS# 28602-81) (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Scrubber liquor pH shall be observed and recorded weekly during operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Records of scrubber liquor pH shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No less than 3.0 miles of roads shall be paved and properly maintained with hot mix asphalt material at permittee's South Belridge field on Poleline Road - From the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Scrubber shall be utilized whenever TEOR gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. This unit shall be fired exclusively on natural gas , which may consist of one or a mixture of fuels including vapor recovery gas, produced gas, and purchased gas. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

13. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

17. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-142-32 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, AND SHARED SO2 SCRUBBER LISTED ON S-1547-141, (#127 DIS# 28603-81) (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. No less than 3.0 miles of roads shall be paved and properly maintained with hot mix asphalt material at permittee's South Belridge field on Poleline Road - From the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Scrubber shall be utilized whenever TEOR gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070 and Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Scrubber liquor pH shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Records of scrubber liquor pH shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit

16. 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

17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-143-33 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION AND SHARED SO2 SCRUBBER LISTED ON S-1547-144, (#128 DIS# 28612-82) (ANDERSON/FITZGERALD DEHY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Scrubber liquor pH shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Records of scrubber liquor pH shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. No less than 3.0 miles of roads shall be paved and properly maintained with hot mix asphalt material at permittee's South Belridge field on Poleline Road - From the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Scrubber shall be utilized whenever TEOR gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. This unit shall be fired exclusively on natural gas , which may consist of one or a mixture of fuels including vapor recovery gas, produced gas, and purchased gas. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
17. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-144-36 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, AND SHARED SO2 SCRUBBER LISTED ON S-1547-143, (#129 DIS# 28613-82) (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. (Adjust as necessary) [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Scrubber liquor pH shall be observed and recorded weekly during operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of scrubber liquor pH shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. No less than 3.0 miles of roads shall be paved and properly maintained with hot mix asphalt material at permittee's South Belridge field on Poleline Road - From the intersection of Main Camp Road to 1/2 mile north of Entrance 'D'. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit

14. Scrubber shall be utilized whenever TEOR gas is incinerated in steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. This unit shall be fired exclusively on natural gas, which may consist of one or a mixture of fuels including vapor recovery gas, produced gas, and purchased gas. [District Rule 2201] Federally Enforceable Through Title V Permit

17. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

18. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Scrubber liquor pH shall be maintained above 6.15 and shall be continuously monitored. Compliance shall be determined on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.058 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

22. Emission rates shall not exceed any of the following: PM10: 87.0 lb/day, SOx (as SO2): 94.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

23. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

24. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-145-29 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH A COEN ULN BURNER AND FLUE GAS RECIRCULATION, AND SHARED SO2 SCRUBBER LISTED ON S-1547-141 (#130 DIS# 28721-33) (CALSO)

PERMIT UNIT REQUIREMENTS

1. When designated as a dormant emissions unit, the fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with NOx and CO emission limits and a fuel sulfur content certification shall be performed within 60 days of recommencing operation of this unit. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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

12. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-147-16 **EXPIRATION DATE:** 05/31/2022

SECTION: SW27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#125, DIS# 27579-81) WITH O2 CONTROLLER.

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions from this unit shall not exceed any of the following limits: NOx (as NO2): 30 ppmv @3% O2, or 400 ppmv CO @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
6. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
8. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit
11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
15. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit
17. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
18. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-148-25 **EXPIRATION DATE:** 05/31/2022

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
21.45 MW GAS FIRED TURBINE ENGINE COGENERATION FACILITY #1 WITH GENERAL ELECTRIC MODEL LM2500 PE GAS TURBINE AND UNFIRED WASTE HEAT RECOVERY STEAM GENERATOR

PERMIT UNIT REQUIREMENTS

1. Fuel consumption shall not exceed 5,650 MMBtu/day of fuel gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 19451. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
3. NOx emissions shall not exceed 75 ppmv @ 15% O2 (one-hour rolling average in accordance with 40 CFR 60.13(h)). Compliance with this condition is assured by compliance with NSR limit of 0.011 lb NOx/MMBtu. [40 CFR 60.332(b)] Federally Enforceable Through Title V Permit
4. Except during startup, shutdown, and stack transitions, emission rates (three-hour rolling average) shall not exceed any of the following: NOx: 0.011 lb/MMBtu or 3 ppmv @ 15% O2; and CO: 0.076 lb/MMBtu or 33.9 ppmvd @15% O2. [District Rule 4703, 5.1, 5.2 and 7.2] Federally Enforceable Through Title V Permit
5. Except during periods of gas turbine engine startup/shutdown and stack transition, emission rates from the gas turbine engine shall not exceed any of the following: 0.016 lb-PM10/MMBtu, 0.010 lb-SOx/MMBtu, or 0.008 lb-VOC/MMBtu. [District Rule 2201,40 CFR 60.333] Federally Enforceable Through Title V Permit
6. On days of gas turbine engine startup/shutdown, permittee shall demonstrate compliance with NOx daily emission limitation by records of calculations using CEM data, fuel rate data, and daily hours of operation data. [District Rule 1080] Federally Enforceable Through Title V Permit
7. Maximum daily emission limitations (DEL) shall not exceed any of the following: 190.2 lb-NOx/day; 56.5 lb-SOx/day, 90.4 lb-PM10/day, 429.4 lb-CO/day, or 45.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The ammonia injection rate shall not exceed 25 lb/hr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
9. The operator shall monitor the ammonia injection rate during CEM breakdowns to demonstrate NOx emission compliance. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
10. Startup shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703, 3.29 and 5.3] Federally Enforceable Through Title V Permit
11. Shutdown shall be defined as the period of time, not to exceed two hours, during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.26 and 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Stack transitions shall comply with the following criteria for HRSG Bypass Transition Period: the duration of time that the turbine's operation transitions between the heat recovery steam generator and bypass exhaust stack, when the selective catalytic reduction catalyst is not within the required temperature range or the required ammonia saturation level has not yet been achieved, the transition period not exceeding two hours, and NOx emissions not exceeding 15 ppmvd, corrected to 15% O2, averaged over 2 hours, and the applicable CO compliance limits not being exceeded. [District Rule 4703] Federally Enforceable Through Title V Permit

13. Permittee shall report the following emission exceedances to the District: NOx emission rate on a three-hour average and daily NOx emissions during days of gas turbine engine startup/shutdown or stack transition. [District Rule 1080] Federally Enforceable Through Title V Permit

14. Permittee shall maintain accurate daily records of fuel gas consumption and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Permittee shall certify, maintain, operate and quality-assure a system which continuously measures and records the exhaust gas oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0, 40 CFR 60.334(b), District Rule 4703, 6.2.1, & PSD SJ 85-03] Federally Enforceable Through Title V Permit

16. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

17. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

18. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

19. Permittee shall maintain records of: 1) the occurrence and duration of any startup, shutdown, or malfunction in the operation of turbine; 2) Any malfunction of the air pollution control equipment; 3) any periods during which a CEM or other monitoring device is inoperative; 4) Performance testing, evaluations, calibrations, checks, adjustments and maintenance of CEM; 5) NOx and CO emission measurements. Records shall be retained for 5 years and made available for District inspection upon request. [40 CFR 60.7(b), District Rule 1080, 7.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

20. Permittee shall submit reports of excess emissions for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60.344(j). [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit

21. Permittee shall submit a CEMs written report for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), District Rule 1080, 8.0 and District Rule 2520, 9.6.1& PSD SJ 85-03] Federally Enforceable Through Title V Permit

22. Excess emissions shall be defined as any consecutive 2-hour period during which the average emissions of NOx and CO, as measured by continuous monitoring system exceeds the concentration emissions limits set forth for these pollutants. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall notify the District no later than one hour after determining that a breakdown of the CEMs has occurred. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

24. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of the fuel shall be tested in accordance with 40 CFR 60.344(i). [40 CFR 60.344(i)] Federally Enforceable Through Title V Permit

26. Performance testing to measure exhaust gas NOx and CO concentrations shall be conducted annually. [40 CFR 60.335(b), District Rule 4703, 6.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

27. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335 and District Rules 1081, 4703, 6.4 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

28. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

29. Performance testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit

30. Daily records of NOx and CO emission calculations during days of startup/shutdown or stack transitions shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Permittee shall operate and maintain a continuous monitoring system to measure the ambient air temperature. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

32. Permittee shall operate and maintain a water injection system and instrumentation to continuously monitor and record levels of consumption of fuel and water. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

33. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

34. All correspondence as required by this permit shall be forwarded to: SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

35. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for stack transitions, total hours of operation, and quantity and heat input of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

36. The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 3, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-149-24 **EXPIRATION DATE:** 05/31/2022

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 21.45 MW GAS FIRED TURBINE ENGINE COGENERATION FACILITY #2 WITH GENERAL ELECTRIC MODEL LM2500 PE GAS TURBINE, UNFIRED WASTE HEAT RECOVERY STEAM GENERATOR EQUIPPED WITH SCR AND AMMONIA INJECTION, AND BYPASS STACK EQUIPPED WITH SCR AND AMMONIA INJECTION:

PERMIT UNIT REQUIREMENTS

1. Fuel consumption shall not exceed 5,650 MMBtu/day of fuel gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
3. Except during periods of gas turbine engine startup/shutdown and stack transition, emission rates (three-hour rolling average) shall not exceed any of the following: 0.0111 lb-NOx/MMBtu or 3 ppmv-NOx @ 15% O2, and 0.076 lb-CO/MMBtu or 33.9 ppmvd-CO @15% O2. [District Rules 2201 and 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
4. Except during periods of gas turbine engine startup/shutdown and stack transition, emission rates shall not exceed any of the following: 0.016 lb-PM10/MMBtu, 0.010 lb-SOx/MMBtu, 0.008 lb-VOC/MMBtu. [District Rule 2201, 40 CFR 60.333] Federally Enforceable Through Title V Permit
5. Maximum daily emission limitations (DEL) shall not exceed any of the following: 190.2 lb-NOx/day, 56.5 lb-SOx/day, 90.4 lb-PM10/day, 429.4 lb-CO/day, and 45.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
7. Stack transitions shall comply with the following criteria for HRSG Bypass Transition Period: the duration of time that the turbine's operation transitions between the heat recovery steam generator and bypass exhaust stack, when the selective catalytic reduction catalyst is not within the required temperature range or the required ammonia saturation level has not yet been achieved, the transition period not exceeding two hours, and NOx emissions not exceeding 15 ppmvd, corrected to 15% O2, averaged over 2 hours, and the applicable CO compliance limits not being exceeded. [District Rule 4703] Federally Enforceable Through Title V Permit
8. On days of gas turbine engine startup/shutdown and/or stack transition, permittee shall demonstrate compliance with NOx daily emission limitation by records of calculations using CEMS data, fuel rate data, and daily hours of operation data. [District Rule 1080] Federally Enforceable Through Title V Permit
9. Permittee shall report the following emission exceedances to the District: NOx emission rate on a three-hour average, and DEL of NOx during days of gas turbine engine startup/shutdown or stack transition. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance testing shall be conducted annually as required by the District-approved plan. [District Rule 1081] Federally Enforceable Through Title V Permit
11. 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
12. Permittee shall maintain accurate daily records of fuel gas consumption and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Compliance with sulfur oxide emission limits shall be demonstrated by fuel gas sulfur analysis by independent testing laboratory annually. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Permittee shall comply in full with Rule 4001 (New Source Performance Standards) requirements, including notification, recordkeeping and monitoring requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
15. Continuous emission monitoring systems shall be calibrated and operated according to EPA guidelines as specified in CFR, Part 60, Appendix B. [District Rule 4001 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
16. The owner or operator shall install, certify, maintain, operate and quality-assure a system which continuously measures and records the exhaust gas oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0, 40 CFR 60.334(a), District Rule 4703, 6.2.1, & PSD SJ 85-03] Federally Enforceable Through Title V Permit
17. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
18. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5 & PSD SJ 85-03] Federally Enforceable Through Title V Permit
19. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of: 1) the occurrence and duration of any startup, shutdown, or malfunction in the operation of turbine; 2) Any malfunction of the air pollution control equipment; 3) any periods during which a continuous monitoring system or monitoring device is inoperative; 4) Performance testing, evaluations, calibrations, checks, adjustments and maintenance of any continuous emission monitors; 5) NOx and CO Emission measurements. Records shall be retained for 5 years and made available for District inspection upon request. [40 CFR 60.7(b), District Rule 1080, 7.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit
21. Permittee shall submit a CEMS written report for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), District Rule 1080, 8.0 and District Rule 2520, 9.3.2 & PSD SJ 85-03] Federally Enforceable Through Title V Permit
22. Excess emissions shall be defined as any consecutive 2-hour period during which the average emissions of NOx and CO, as measured by continuous monitoring system exceeds the concentration emissions limits set forth for these pollutants. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall notify the District no later than one hour after determining that a breakdown of the CEMs has occurred. The operator shall inform the District of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

24. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

25. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 3.5 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 3.5 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(h) & District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

26. Performance testing to measure exhaust gas NOx and CO concentrations shall be conducted annually. [40 CFR 60.335(b), District Rule 4703, 6.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

27. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335 and District Rules 1081, 4703, & PSD SJ 85-03] Federally Enforceable Through Title V Permit

28. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

29. Performance testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit

30. Daily records of NOx and CO emission calculations during days of startup/shutdown or stack transition shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

31. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

32. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

33. The operator shall monitor the ammonia injection rate that was established at the time of startup emission testing during CEMS breakdowns to demonstrate NOx emission compliance. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit

34. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for stack transition, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.3.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit

35. The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 3, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit

36. Permittee shall operate and maintain a continuous monitoring system to measure the ambient air temperature. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

37. Permittee shall operate and maintain a water injection system and instrumentation to continuously monitor and record levels of consumption of fuel and water. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

39. All correspondence as required by this permit shall be forwarded to: APCO, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

40. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-151-25 **EXPIRATION DATE:** 05/31/2022

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
21.45 MW GAS FIRED TURBINE ENGINE COGENERATION FACILITY #3 WITH GENERAL ELECTRIC MODEL LM2500 PE GAS TURBINE, UNFIRED WASTE HEAT RECOVERY STEAM GENERATOR EQUIPPED WITH SCR AND AMMONIA INJECTION, AND BYPASS STACK EQUIPPED WITH SCR AND AMMONIA INJECTION

PERMIT UNIT REQUIREMENTS

1. Fuel consumption shall not exceed 5,650 MMBtu/day of fuel gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
3. Except during periods of gas turbine engine startup/shutdown and stack transition, emission rates (three-hour rolling average) shall not exceed any of the following: 0.0111 lb-NOx/MMBtu or 3 ppmv-NOx @ 15% O2, and 0.076 lb-CO/MMBtu or 33.9 ppmvd-CO @15% O2. [District Rule 4703, 5.1.2, 5.2 and District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during periods of gas turbine engine startup/shutdown and stack transition, emission rates shall not exceed any of the following: 0.016 lb-PM10/MMBtu, 0.010 lb-SOx/MMBtu, or 0.008 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum daily emission limitations (DEL) shall not exceed any of the following: 190.2 lb-NOx/day, 56.5 lb-SOx/day, 90.4 lb-PM10/day, 429.4 lb-CO/day, and 45.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
7. Stack transitions shall comply with the following criteria for HRSG Bypass Transition Period: the duration of time that the turbine's operation transitions between the heat recovery steam generator and bypass exhaust stack, when the selective catalytic reduction catalyst is not within the required temperature range or the required ammonia saturation level has not yet been achieved, the transition period not exceeding two hours, and NOx emissions not exceeding 15 ppmvd, corrected to 15% O2, averaged over 2 hours, and the applicable CO compliance limits not being exceeded. [District Rule 4703] Federally Enforceable Through Title V Permit
8. On days of gas turbine engine startup/shutdown and/or stack transition, permittee shall demonstrate compliance with NOx daily emission limitation by records of calculations using CEM data, fuel rate data, and daily hours of operation data. [District Rule 1080] Federally Enforceable Through Title V Permit
9. Permittee shall report the following emission exceedances to the District: NOx emission rate on a three-hour average, and DEL of NOx during days of gas turbine engine startup/shutdown. [District Rule 1080] Federally Enforceable Through Title V Permit
10. Compliance testing shall be conducted annually as required by the District-approved plan. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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
12. Permittee shall maintain accurate daily records of fuel gas consumption and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Compliance with sulfur oxide emission limits shall be demonstrated by fuel gas sulfur analysis by independent testing laboratory annually. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Permittee shall comply in full with Rule 4001 (New Source Performance Standards) requirements, including notification, recordkeeping and monitoring requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
15. Continuous emission monitoring systems shall be calibrated and operated according to EPA guidelines as specified in CFR, Part 60, Appendix B. [District Rule 4001 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
16. Permittee shall certify, maintain, operate and quality-assure a system which continuously measures and records the exhaust gas oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0, 40 CFR 60.334(b), District Rule 4703, 6.2.1, & PSD SJ 85-03] Federally Enforceable Through Title V Permit
17. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
18. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5 & PSD SJ 85-03] Federally Enforceable Through Title V Permit
19. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of: 1) the occurrence and duration of any startup, shutdown, or malfunction in the operation of turbine; 2) Any malfunction of the air pollution control equipment; 3) any periods during which a continuous monitoring system or monitoring device is inoperative; 4) Performance testing, evaluations, calibrations, checks, adjustments and maintenance of any continuous emission monitors; 5) NOx and CO Emission measurements. Records shall be retained for 5 years and made available for District inspection upon request. [40 CFR 60.7(b), District Rule 1080, 7.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit
21. Permittee shall submit a CEMs written report for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), District Rule 1080, 8.0 and District Rule 2520, 9.6.1& PSD SJ 85-03] Federally Enforceable Through Title V Permit
22. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Excess emissions shall be defined as any consecutive 2-hour period during which the average emissions of NOx and CO, as measured by continuous monitoring system exceeds the concentration emissions limits set forth for these pollutants. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

24. Operator shall notify the District no later than one hour after the determining that a breakdown of the CEMS has occurred. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

25. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 3.5 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 3.5 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

26. Performance testing to measure exhaust gas NOx and CO concentrations shall be conducted annually. [40 CFR 60.335(b), District Rule 4703, 6.3 & PSD SJ 85-03] Federally Enforceable Through Title V Permit

27. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335(b) and District Rules 1081, 4703, & PSD SJ 85-03] Federally Enforceable Through Title V Permit

28. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

29. Performance testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit

30. Daily records of NOx and CO emission calculations during days of startup/shutdown or stack transition shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Permittee shall operate and maintain a continuous monitoring system to measure the ambient air temperature. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

32. Permittee shall operate and maintain a water injection system and instrumentation to continuously monitor and record levels of consumption of fuel and water. [PSD SJ 85-03] Federally Enforceable Through Title V Permit

33. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

34. All correspondence as required by this permit shall be forwarded to: APCO, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

35. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rules 4102 and 2201] Federally Enforceable Through Title V Permit

36. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rules 4102 and 2201] Federally Enforceable Through Title V Permit

37. The operator shall monitor the ammonia injection rate that was established at the time of startup emission testing during CEM breakdowns to demonstrate NOx emission compliance. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for stack transition, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.4.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit

39. The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 3, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-152-22 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH COEN ULN BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#154, DIS# 39565-88) (CALSO)

PERMIT UNIT REQUIREMENTS

1. This generator is approved to operate at the following locations: Sec. NE12, T30S, R21E and Sec. NW18, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-152-22 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH COEN ULN BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#154, DIS# 39565-88) (CALSO)

PERMIT UNIT REQUIREMENTS

1. This generator is approved to operate at the following locations: Sec. NE12, T30S, R21E and Sec. NW18, T30S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-157-29 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MM BTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN ULN BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#156, DIS# 33749-90)

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. If Rule 4320 fee option is selected, permittee shall provide to the District at least (7) calendar days advance notice and pay the applicable fees prior to recommencing operation. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If Rule 4320 fee option is not selected, this unit shall not be re-started unless it has been tuned or retrofitted to meet the applicable Rule 4320 NOx limit. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This generator is approved to operate at the following locations, SW Sec. 35, T28S, R21E, Sec. 06, T28S, R20E, SW Sec. 23, T29S, R21E and Sec. 12, T28S, R20E. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
16. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Aera Energy shall notify the District of the approved burner to be installed and the alternative monitoring method selected prior to implementation of this ATC. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. 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
19. ATC S-1547-157-25 shall be implemented prior to or concurrently with this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-158-22 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN ULN BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#155, DIS# 33303-89) (CALSO)

PERMIT UNIT REQUIREMENTS

1. This generator is approved to operate at the following locations: Sec. NE12, T30S, R21E and Sec. 34, T30S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.8 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.005 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-159-25 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH COEN QLN LOW NOX BURNER (#A-1 DIS# 39578-88) (LOCKWOOD) AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
3. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-164-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW35 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN BURNER AND FLUE GAS RECIRCULATION; APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (KENDON 51)

PERMIT UNIT REQUIREMENTS

1. This generator is approved to operate at the following locations, NE Sec. 35, T32S, R23E; Sec. 08, T32S, R21E and SW Sec. 35, T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-168-27 **EXPIRATION DATE:** 05/31/2022

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

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN LOW NOX BURNER (#J-1, DIS# 27461-71) AND FLUE GAS RECIRCULATION (WIER)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 b/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE.

13. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-174-30 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN LOW NOX BURNER AND FLUE GAS RECIRCULATION (WIER J-8, DIS# 27223-74)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.070 lb/MMBtu, SOx (as SO2): 0.092 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 105.0 lb/day, SOx (as SO2): 138.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-175-30 **EXPIRATION DATE:** 05/31/2022

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

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN LOW NOX BURNER (#J-11, DIS# 27457-81) AND FLUE GAS RECIRCULATION (WIER)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rule 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-179-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SE16 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR THERMOTICS NATURAL GAS FIRED STEAM GENERATOR (#J-5 DIS# 27465-71) WITH O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following: PM10; 0.008 lb/MMBtu, SOx (as SO2); 0.003 lb/MMBtu, VOC; 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2; or CO: 25.8 ppmv @3% O2. [District Rules 2201, 4305] Federally Enforceable Through Title V Permit
5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generator firebox convection section and all flue gas ductwork shall be maintained to minimize emissions to the atmosphere. [District Rule 2201]
7. Steam generator shall be equipped with O2 controller. [District Rule 2201] Federally Enforceable Through Title V Permit
8. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Only PUC-quality natural gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 5.4] Federally Enforceable Through Title V Permit

14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

15. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

17. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

18. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4305, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4.0 and 4305, 6.1] Federally Enforceable Through Title V Permit

21. All records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-187-15 **EXPIRATION DATE:** 05/31/2022

SECTION: SE21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#J-6 DIS# 28771-85) WITH O2 ANALYZER/CONTROLLER (GORE)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. (Adjust as necessary) [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following: PM10; 0.008 lb/MMBtu, SOx (as SO2); 0.003 lb/MMBtu, VOC; 0.003 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2; or CO: 25.8 ppmv @3% O2. [District Rules 2201, 4305] Federally Enforceable Through Title V Permit
5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
6. Steam generator firebox convection section and all flue gas ductwork shall be maintained to minimize emissions to the atmosphere.
7. Steam generator shall be equipped with O2 controller.
8. Only PUC-quality natural gas shall be used as fuel.
9. Compliance testing shall be conducted annually or as required by the District-approved plan.
10. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081]
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
12. The permittee shall maintain records of fuel usage for each day of operation, in the format approved by the District.
13. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-190-30 **EXPIRATION DATE:** 05/31/2022

SECTION: V **TOWNSHIP:** V **RANGE:** V

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR WITH A COEN ULN BURNER, FLUE GAS RECIRCULATION, VAPOR RECOVERY PIPING FROM S-1135-21, AND APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (BUENA FE #6, DIS# 4624-82)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Approved locations for this steam generator are: NE22 32S 23E, SW22 T31S R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.034 lb/MMBtu, SOx (as SO2): 0.220 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
11. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-234-36 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH COEN ULN BURNER AND FLUE GAS RECIRCULATION (#N-6, DIS# 27464-71) (NATIONAL)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.066 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
3. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-238-30 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN BURNER AND FLUE GAS RECIRCULATION (#N-1, DIS# 2746271) (NATIONAL)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.066 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-241-25 **EXPIRATION DATE:** 05/31/2022

SECTION: 01 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH MITSUBISHI LO-NOX BURNER, STAGED COMBUSTION, FLUE GAS RECIRCULATION AND VAPOR PIPING FROM S-1547-707, (#100, DIS# 28692-82) (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.0192 lb/MMBtu, SOx (as SO2): 0.0537 lb/MMBtu, VOC: 0.0028 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed any of the following: PM10: 28.8 lb/day, SOx (as SO2): 80.6 lb/day, VOC: 4.2 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

12. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-242-22 **EXPIRATION DATE:** 05/31/2022

SECTION: 01 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH MITSUBISHI LO-NOX BURNER, STAGED COMBUSTION, FLUE GAS RECIRCULATION AND VAPOR PIPING FROM S-1547-707, (#101, DIS# 28693-82) (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.0192 lb/MMBtu, SOx (as SO2): 0.0537 lb/MMBtu, VOC: 0.0028 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, emission rates shall not exceed any of the following: PM10: 28.8 lb/day, SOx (as SO2): 80.6 lb/day, VOC: 4.2 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-243-22 **EXPIRATION DATE:** 05/31/2022

SECTION: 01 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH MITSUBISHI LO-NOX BURNER, STAGED COMBUSTION, FLUE GAS RECIRCULATION AND VAPOR PIPING FROM S-1547-707, (#102, DIS# 28732-83) (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.0192 lb/MMBtu, SOx (as SO2): 0.0537 lb/MMBtu, VOC: 0.0028 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 28.8 lb/day, SOx (as SO2): 80.6 lb/day, VOC: 4.2 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-244-23 **EXPIRATION DATE:** 05/31/2022

SECTION: 01 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH MITSUBISHI LO-NOX BURNER, STAGED COMBUSTION, FLUE GAS RECIRCULATION AND VAPOR PIPING FROM S-1547-707, (#103, DIS# 28694-82) (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.0192 lb/MMBtu, SOx (as SO2): 0.0537 lb/MMBtu, VOC: 0.0028 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 28.8 lb/day, SOx (as SO2): 80.6 lb/day, VOC: 4.2 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-248-23 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH COEN ULNBURNER AND FLUE GAS RECIRCULATION (#N-5, DIS# 28772-85) (NATIONAL)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.066 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
3. Permittee shall maintain accurate records of daily volume of natural gas and daily volume of vapor recovery gas incinerated, and maintain a log of calculated daily SO2 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-251-17 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
TRICO SUPERIOR HEATER TREATER #V-201, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (LOCKWOOD LEASE)

PERMIT UNIT REQUIREMENTS

1. Heater treater and appurtenances shall be maintained leak-free (as defined in Rule 4623) except during periods of unit maintenance or cleaning, vapor control system maintenance, and power curtailment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Inspection Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-252-14 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
TRICO SUPERIOR HEATER TREATER, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Heater treater and appurtenances shall be maintained leak-free (as defined in Rule 4623) except during periods of unit maintenance or cleaning, vapor control system maintenance, and power curtailment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Inspection Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-356-25 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 27S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #159 DIS # 39602-88 WITH FLUE GAS RECIRCULATION - VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This steam generator is approved to operate at the following locations: Sec. NE35, T27S, R20E and Sec. 28, T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and Rule 4306, 5.1] Federally Enforceable Through Title V Permit
8. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
9. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
10. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
11. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
13. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
14. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit
16. 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 NOx and CO source testing requirement. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit
17. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
19. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081; 4305, 6.2] Federally Enforceable Through Title V Permit
20. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-357-22 **EXPIRATION DATE:** 05/31/2022

SECTION: Var. **TOWNSHIP:** **RANGE:**

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR DANIEL INDUSTRIES NATURAL GAS FIRED STEAM GENERATOR #160 DIS# 39601-88 WITH NORTH AMERICAN BURNER ASSEMBLY AND O2 CONTROLLER; ALSO APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This steam generator is approved to operate at the following locations: Sec. NE35, T27S, R20E; Sec. 28, T28S, R21E; Sec. NW35, T12N, R24W and SE35, T12N, R24W. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
6. Emissions from this unit shall not exceed any of the following limits: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 15 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 1.1 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. 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, 5.4 and 4306, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the NOx and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit

12. All emissions measurements for NOx and CO shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit

13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

14. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

15. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [] Y [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

16. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 6.1 and 4305, 6.2] Federally Enforceable Through Title V Permit

17. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-359-33 **EXPIRATION DATE:** 05/31/2022

SECTION: 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
VAPOR COLLECTION AND CONTROL SYSTEM SERVING 1657 THERMALLY ENHANCED WELLS IN SECTIONS 1, 2, 3, 4, 10, 11, 12 OF T29S, R21E, SECTIONS 33, 34, 35 OF T28S, R21E

PERMIT UNIT REQUIREMENTS

1. Vapor collection and control system can receive vapors from tank vapor control system S-1547-888, TEOR system S-1547-1079, free water knockout vessel S-1547-1104, and degassing operation S-1547-1141. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Vapor collection system shall include 2 sulfur scrubbing systems using District approved scrubbing agents. Scrubber(s) may be by-passed only when incinerating vapors in scrubbed steam generator S-1547-47 or when routing gas directly to Sec. 32 Belridge gas plant (S-1543-4). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Scrubbed gases shall be incinerated in steam generators S-1547-726, '-733, '-735 through '-738, '-742 through '-749, '-760, '-761, '-762, '-803, '-834, '-835, and '-837 or shall be routed to the Sec. 32 Belridge gas plant (S-1543-4). Alternatively, the wells can be operated with the casing vents closed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Scrubbed or unscrubbed vapor may be routed to the Sec. 32 Belridge gas plant (S-1543-4) via the Del Sur gas gathering system (compressors S-1578-433, '-434, '-435 and emergency flare S-1548-134). [District Rule 2201] Federally Enforceable Through Title V Permit
5. Vapor collection system shall be equipped with heat exchangers, gas/liquid separators with vane-type mist eliminators, gas compressors, compressor discharge knock-outs, and liquid pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All produced fluids from any well served by vapor collection system which has had the casing vent closed shall be handled only in closed production equipment served by a 99% effective vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Water/VOCs condensate from all liquid knockout drums shall be pumped to production manifold, recycled to production wells for disposal, or pumped to vapor controlled storage tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The regeneration vessel air vent at each sulfur scrubbing system may be vented to atmosphere provided daily emissions from each vent shall not exceed 2.0 lbs VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall determine VOC content of the exhaust at each regeneration vessel air vent semi-annually. If a semi-annual VOC content analysis fails to show compliance, the regeneration vessel air vents shall be tested once per week. If compliance with the VOC content limit has been demonstrated for eight consecutive weeks, then the VOC content testing frequency shall revert to semi-annually. Gas analysis shall be performed using ASTM D-3588. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Total mass flowrate of sulfur compounds in gas leaving sulfur removal systems shall not exceed 336.92 lb/day as sulfur. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions of Volatile Organic Compounds (VOC) shall not exceed 1,888.1 lb/day (including regeneration vessel air vents). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate records of sulfur content and daily vapor flow rate of all uncondensed vapors sent to approved incineration devices(S-1547-726, '-733, '-735 through '-738, '-742 through '-749, '-760, '-761, '-762, '-803, '-834, '-835, and '-837) for disposal. Such records shall be maintained readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-361-27 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS (#150, DIS# 39562-88) (CALSO)

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
2. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
5. While dormant, normal source testing, fuel sulfur certification, and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Approved locations for this steam generator are: Sec. 12 T30S R21E and Sec 12 T28S R20E. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-362-20 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (#151, DIS# 39563-88) (CALSO)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. (Adjust as necessary) [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 4305] Federally Enforceable Through Title V Permit
9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

12. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

14. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

15. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

17. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

19. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit

20. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

21. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

23. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

24. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

25. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

27. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

28. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081; 4305, 6.2] Federally Enforceable Through Title V Permit

29. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-363-19 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (#152, DIS# 39564-88) (CALSO)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Emissions from gaseous fired units shall not exceed 200 lb sulfur compounds/hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural; 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 Rules 4301, 5.2.1, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2 and 4305, 6.2] Federally Enforceable Through Title V Permit

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108.1 (Kern), 404 (Kern), 408 (Kern), 407.2 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. This requirement shall not supersede a more stringent NSR or PSD permit testing requirement. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

13. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

14. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

15. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

16. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

18. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Emission rates shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 25.8 ppmv @ 3% O2. [District Rules 2201 and 4305, 5.1] Federally Enforceable Through Title V Permit

20. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit

22. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit

23. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit

25. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

26. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 6.3] Federally Enforceable Through Title V Permit

27. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

28. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

29. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081; 4305, 6.2] Federally Enforceable Through Title V Permit

30. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-384-4 **EXPIRATION DATE:** 05/31/2022

SECTION: 28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
65,000 BBL (2,730,000 GALLON) FIXED ROOF PETROLEUM STORAGE TANK WITH P/V VENTS #T-470 CONNECTED TO VAPOR RECOVERY SYSTEM SHARED WITH S-1548-45 (OT&M)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall vent only through vapor collection system and discharge only to gas gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. P/v vents shall be set to relieve at a pressure higher than required to activate vapor compressor. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During normal operation, p/v vents shall be vapor tight except for in-breathing. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Condensate shall be disposed of in a manner preventing VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
6. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17 and 3.18] Federally Enforceable Through Title V Permit
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. All tank seams, joints, piping, valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The control efficiency of the VOC construction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under-reported or over-reported. Analysis of halogenated exempt compounds shall be analyzed by ARB Method 422 "Exempt Halogenated VOCs in Gases September 12, 1990". [District Rule 4623, 6.4.6, 6.4.7] Federally Enforceable Through Title V Permit
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623 and Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-414-15 **EXPIRATION DATE:** 05/31/2022

SECTION: SW26 **TOWNSHIP:** 29S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
49 MMBTU/HR KALDAIR MODEL P-20-E PIPE STANDBY FLARE, WITH UP TO TWO SULFATREAT VESSELS (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Visible emissions from flare shall be less than 5% opacity, except for a period or periods aggregating three minutes or less in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Only natural gas shall be used as pilot fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare shall be equipped with an operational gas volume flow meter. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
4. Flare shall be equipped with a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device capable of continuously detecting at least one pilot flame or the flare flame is present. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. Effective on and after July 1, 2012, all pilot monitor downtime shall be reported annually pursuant to Rule 4311, section 6.2.3.6. [District Rule 4311] Federally Enforceable Through Title V Permit
5. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
6. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
7. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
8. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
9. Volume of gas combusted in flare shall not exceed 1.2 MMscf/day and 3.15 MMscf/calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from flare shall not exceed any of the following: PM10: 2.5 lb/MMscf, SOx: 240.65 lb/MMscf (as SO2), NOx: 140 lb/MMscf (as NO2), VOC: 2.8 lb/MMscf, CO: 35 lb/MMscf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Sulfur compound concentration (as H2S) of gas flared shall not exceed 961 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Efficiency of sulfur removal unit shall be maintained at not less than 95% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall demonstrate compliance with sulfur compound concentration limit and sulfur removal efficiency at least once every 12.6 MMscf of gas treated, by sample analysis of inlet and outlet gas streams of sulfur removal unit. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain a record of all sample analysis made of inlet and outlet gas streams, and upon request, shall make the most recent record available for District inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The VOC content of the gas handled by the SulfaTreat vessels shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Operator shall conduct quarterly gas sampling for gas handled by the SulfaTreat vessels and their associated components to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. Representative gas samples are acceptable to determine VOC content (i.e. the SulfaTreat units and flare do not need to be operated to obtain sample). Quarterly samplings shall be reduced to annual samplings if gas samples contain VOC content equal to or less than 10% by weight for eight (8) consecutive quarterly samplings [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of gas handled by the SulfaTreat vessels and their associated components shall be determined by ASTM D1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain a record of the VOC content test results for the gas handled by the SulfaTreat vessels and their associated components for a period of five years and make such records available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Permittee shall keep accurate records of dates and volumes of gas flared. Such records shall be retained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-442-18 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
100 BBL (4,200 GALLON) FIXED ROOF TANK T-116 (10 FT DIAMETER X 8 FT HIGH) WITH VAPOR CONTROL SYSTEM INCLUDING PRE/AFTER COOLERS, SUCTION & DISCHARGE KNOCKOUT VESSELS (S-1547-1204 AND '-1205), 2 -100 HP COMPRESSORS, 2-SULFUR SCRUBBING TOWERS, AND ASSOCIATED PIPING

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall serve tanks S-1547-442, '-443, '-584 through '-587, & '-658, and produced gas piping from the Republic Lease, Sections 5, 7, and 8. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Collected vapors shall be reinjected into DOGGR approved wells or incinerated in steam generators S-1547-159 and S-1547-656. Standby incineration shall be provided in flare S-1547-588 during steam generator shut-down. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only wells approved by the California Department of Conservation Division of Oil, Gas and Geothermal Resources shall be use for reinjection. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Dry H2S scrubbing towers shall be utilized as necessary to maintain compliance with sulfur compounds emission limits of steam generators approved to incinerate vapors from control system. [District Rules 2201 and 4801, 3.0] Federally Enforceable Through Title V Permit
5. Sulfur scrubbing systems shall use District approved scrubbing agents. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Vapor space piping shall also be shared with produced gas piping from the Republic Lease, Sections 5, 7, and 8. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the vapor control system and gas components serving the tank battery shall not exceed 26.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the tank T-116 and gas components serving the tank battery shall not exceed 1.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. LOCKWOOD VAPOR RECOVERY CONDITION: This tank shall only vent to a vapor recovery system except during District approved cleaning and maintenance procedures as described in this permit. The vapor recovery system shall be an APCO-approved system consisting of a closed vent system designed to collect VOCs from the storage tank and a VOC control device. The vapor recovery system shall be maintained in a leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4 of District Rule 4623 (amended May 19, 2005). [District Rules 2201 and 4623, 5.6.1] Federally Enforceable Through Title V Permit
12. LOCKWOOD VAPOR RECOVERY CONDITION: The operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the P/V vent setpoints on the tanks. [District Rule 2520] Federally Enforceable Through Title V Permit
13. LOCKWOOD VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
14. LOCKWOOD VAPOR RECOVERY CONDITION: Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
15. LOCKWOOD INSPECTION CONDITION: Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. LOCKWOOD INSPECTION CONDITION: Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. LOCKWOOD INSPECTION CONDITION: Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. LOCKWOOD INSPECTION CONDITION: Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
19. LOCKWOOD INSPECTION CONDITION: Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this permit. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this permit. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. LOCKWOOD INSPECTION CONDITION: If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
21. LOCKWOOD INSPECTION CONDITION: Any component found to be leaking on two consecutive annual inspections is in violation of this permit, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. LOCKWOOD INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit

23. LOCKWOOD CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

24. LOCKWOOD CLEANING CONDITION: Permittee shall notify the APCO in writing at least three (3) days for fixed roof tanks and one (1) day for pressure vessels (as defined in Rule 4623) prior to performing degassing and interior cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

25. LOCKWOOD CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank/vessel shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) exhausting VOCs contained in the vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water. or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit

26. LOCKWOOD CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit

27. LOCKWOOD CLEANING CONDITION: During tank degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit

28. LOCKWOOD CLEANING CONDITION: To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit

29. LOCKWOOD CLEANING CONDITION: After a tank/vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in the tank/vessel. [District Rule 4623] Federally Enforceable Through Title V Permit

30. LOCKWOOD CLEANING CONDITION: While performing interior cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

31. LOCKWOOD CLEANING CONDITION: Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. LOCKWOOD CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit

33. LOCKWOOD CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit

34. LOCKWOOD CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit

35. LOCKWOOD CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-443-13 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF (29.7 FT. DIAMETER X 26.25 FT. HIGH) CONE BOTTOM SURGE TANK T-115 CONNECTED TO VAPOR CONTROL SYSTEM SHARED WITH S-1547-442 (LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 2.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-460-19 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL (126,000 GALLON) FIXED ROOF CLARIFIER TANK #T301, OIL/WATER FLOTATION CELL, AND VAPOR CONTROL SYSTEM SHARED BETWEEN TANKS S-1547-460, '461, '462, '463 & '465, & WELLS IN TEOR SYSTEM S-1547-708 (NATIONAL RECYCLE PLANT)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Except during cleaning operations, emissions shall not exceed 2.81 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control system shall be equipped with separator vessel(s), suction scrubbers, discharge scrubber(s), H2S scrubber(s), heat exchanger(s), vapor compressor(s), vapor piping to vapor control system listed in S-1135-20, uncondensed vapor line from the steam enhanced well vapor control system listed on S-1135-20 and vapor piping to steam generators S-1547-234, '238 and '248 or S-1135-12 and '24. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the vapor control system piping attached to S-1135-20 shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. NATIONAL DEHY TESTING CONDITION: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
6. NATIONAL DEHY TESTING CONDITION: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
7. NATIONAL DEHY TESTING CONDITION: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
8. NATIONAL DEHY VAPOR RECOVERY CONDITION: Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
9. NATIONAL DEHY VAPOR RECOVERY CONDITION: Except during authorized tank cleaning operations, the operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the tank pressure relief valve settings. The operator shall verify vapor recovery compressor activation pressure on quarterly basis to ensure that compressor activation pressure does not exceed tank pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. NATIONAL DEHY VAPOR RECOVERY CONDITION: The tank PV valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
11. NATIONAL DEHY VAPOR RECOVERY CONDITION: Tank roof, seams, welds, joints, gauge hatches, sample wells, pressure relief valves, etc. shall be maintained in a leak-free condition (as defined in District Rule 4623), [District Rule 2201] Federally Enforceable Through Title V Permit
12. NATIONAL DEHY VAPOR RECOVERY CONDITION: Tank pressure/vacuum valve (varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions by plugging the opening during removal of the varec valve. [District Rule 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. NATIONAL DEHY VAPOR RECOVERY CONDITION: The pressure transmitters shall be inspected and maintained in good operating condition. The inspections shall be conducted not more than once per quarter. Replacing and repairing of pressure transmitters shall not exceed one hour per day per transmitter. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. NATIONAL DEHY VAPOR RECOVERY CONDITION: Permittee shall maintain records of dates of periodic tank inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. NATIONAL DEHY VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
16. NATIONAL DEHY CLEANING CONDITION: During tank cleaning, only one tank containing liquids with a concentration greater than 35 milligrams of VOC per liter, as determined by EPA Test Method 413.2, 428.1 or 8260, shall be vented to the atmosphere at one time. [District Rule 2201] Federally Enforceable Through Title V Permit
17. NATIONAL DEHY CLEANING CONDITION: There shall be no throughput during cleaning of this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
18. NATIONAL DEHY CLEANING CONDITION: This tank shall not be cleaned more often than once per quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
19. NATIONAL DEHY CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
20. NATIONAL DEHY CLEANING CONDITION: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. NATIONAL DEHY CLEANING CONDITION: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
22. NATIONAL DEHY CLEANING CONDITION: Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least two hours after all the liquid in the tank has been drained; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 4)Vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. NATIONAL DEHY CLEANING CONDITION: Tank cleaning shall be performed using one of the following solvents: water, hot water, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

24. NATIONAL DEHY CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date and time that tank cleaning was initiated, the date and time tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

25. NATIONAL DEHY INSPECTION CONDITION: A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17 and 3.18] Federally Enforceable Through Title V Permit

26. NATIONAL DEHY INSPECTION CONDITION: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

27. NATIONAL DEHY INSPECTION CONDITION: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. NATIONAL DEHY INSPECTION CONDITION: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. NATIONAL DEHY INSPECTION CONDITION: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. NATIONAL DEHY INSPECTION CONDITION: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. NATIONAL DEHY INSPECTION CONDITION: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. NATIONAL DEHY INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-461-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,000 BBL (42,000 GALLON) FIXED ROOF, WELDED PETROLEUM REJECT TANK (#T-110) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1547-460 (NATIONAL DEHY)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. This unit is subject to the National Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-462-9 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL (21,000 GALLON) WELDED, PETROLEUM FIXED ROOF SAND TANK (#T-500) WITH VAPOR CONTROL SYSTEM LISTED ON PTO # S-1547-460 (NATIONAL RECYCLE PLANT)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. This unit is subject to the National Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-463-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) WELDED, FIXED ROOF PETROLEUM STOCK TANK (#T-109) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PTO S-1547-460 (NATIONAL DEHY)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank vapors shall be vented to vapor control system listed on permit S-1547-460. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the National Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-465-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL (126,000 GALLON) WELDED, FIXED ROOF PETROLEUM STOCK TANK (#T-108) WITH VAPOR CONTROL SYSTEM LISTED ON S-1547-460 (NATIONAL DEHY)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. This unit is subject to the National Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-536-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
5 UNCONTROLLED CYCLIC OIL WELLS

PERMIT UNIT REQUIREMENTS

1. The total number of cyclic wells on this Permit shall not exceed 5 and shall be located more than 1,000 feet from an existing well vent vapor control system operated by permittee, and the operation shall be under District permit. [District Rule 4401, 4.4] Federally Enforceable Through Title V Permit
2. An accurate roster of all cyclic wells on this Permit shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request [District Rules 2201 and 4401, 4.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-584-16 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) FIXED ROOF PETROLEUM STORAGE TANK T-210 CONNECTED TO VAPOR CONTROL SYSTEM LISTED IN S-1547-442- LOCKWOOD DEHY

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-585-14 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) FIXED ROOF STOCK TANK T-220 (38.6 FT DIAMETER X 24 FT HIGH) CONNECTED TO VAPOR CONTROL SYSTEM SHARED WITH S-1547-442(LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-586-13 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, STOCK TANK T-150 CONNECTED TO VAPOR CONTROL SYSTEM (LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-587-13 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, STOCK TANK T-160 CONNECTED TO VAPOR CONTROL SYSTEM (LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-588-6 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
4 MMBTU/HR JOHN ZINK MODEL #EEF STANDBY FLARE, 30 FT. OVERALL HEIGHT, WITH ONE PILOT AND TYPE #EEF JOHN ZINK ARRESTOR (LOCKWOOD)

PERMIT UNIT REQUIREMENTS

1. Only natural gas shall be used as pilot fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No more than 137 MSCFD of noncondensible gases from Lockwood Dehydration Facility and the Republic Lease shall be combusted in flare. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare shall be operated only when steam generators S-1547-159 or S-1547-656 becomes inoperable and not more than seventy-two hours in a month. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall keep accurate records of dates and volumes of gas flared. Such records shall be retained for a period of at least five years and be made available for District inspection upon request. [District Rules 2201and 4311, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-638-12 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
396 CLOSED VENT CYCLIC WELLS AND 5,384 CLOSED VENT STEAM DRIVE WELLS. (WESTSIDE)

PERMIT UNIT REQUIREMENTS

1. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-643-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GAL) FIXED ROOF CRUDE OIL SURGE TANK T-410, 38.6 FT DIAMETER X 25 FT HIGH, WITH SHARED VAPOR CONTROL SYSTEM BETWEEN S-1547-643 TO '-645, '-647 TO '-649, AND '-652 TO '-654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall include vapor piping from free water knockouts, tanks S-1547-643 to '645, '647 to '649, & '652 to '654, with pressure relief vents (for emergency atmospheric release) located on the collection line. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Vapor control system shall include vapor compressors with suction and discharge knockout vessels, serving tanks and vessels described above. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor piping from free water knockout may connect upstream or downstream of vapor compressors to accommodate operational needs. [District Rule 2201] Federally Enforceable Through Title V Permit
4. During power-switching events, no produced fluids shall be introduced into any tank at the Weir tank battery. All production into the tanks shall cease prior to shutting down the tank vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Each power-switching event shall not exceed 2 hours, and total annual hours of vapor control system shutdown during power-switching shall not exceed 96 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to disconnecting power from the TVR systems, during a power-switching event, AERA shall monitor the pressure in the shutdown TVR system to determine pressure relief valve(s) pressure settings are not exceeded. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, there shall be no leaks (> 10,000 ppmv) from any vapor component in the TVR system. [District Rule 2201] Federally Enforceable Through Title V Permit
8. During power-switching events, permittee shall monitor TVR system piping and vapor components to ensure there are no leaks (> 10,000 ppmv). [District Rule 2201] Federally Enforceable Through Title V Permit
9. Vapor compressor(s) may be operated continuously or as required by demand. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operator shall monitor vapor control system pressures on a quarterly basis to ensure that system pressure does not exceed pressure relief valve setting. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Vapor control system pressure transmitters shall be inspected and maintained in good operating condition. The inspections shall be conducted on a quarterly basis. Replacing and repairing of each pressure transmitter shall not exceed one hour per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Vapor disposal shall be limited to injection into the formation. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Disposal of tank vapor by injection into the formation shall only be performed using DOGGR approved wells. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. VOC fugitive emissions from the components in gas service on the tank, FWKO vessels, tank vapor collection piping and vapor control system shall not exceed 12.9 lb-VOC/day (includes 0.46 lb/day, 0.46 lb-VOC/quarter for VRS sensor maintenance). [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of THC in collected vapors shall be sampled not less than annually. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Fixed roof tank shall be fully enclosed and shall be maintained in a leak-free condition. The APCO-approved vapor control system consists of a closed vent system that collects all VOCs from the storage tank and vents them to DOGGR approved disposal well(s). The vapor control system shall be maintained in a leak-free condition. Vapor control system shall reduce VOC emissions by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
20. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
22. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
24. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
27. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
28. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

30. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

31. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

34. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

35. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

36. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

37. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

39. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

41. Permittee shall maintain records of DOGGR approved injection wells connected to this vapor control system, % VOC of THC in collected vapors, the date and duration of vapor control system maintenance operations, and all records of required monitoring data and support information. [District Rule 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

42. Permittee shall maintain records of date and duration of each power switching event. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

43. All records required by this permit shall be maintained and retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 1070 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-644-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-420, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 1.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-645-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-430, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-647-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24 FT. HIGH, CRUDE OIL SURGE TANK T-460, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-648-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-470, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-649-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-480, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible(over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-652-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24. FT. HIGH, CRUDE OIL SKIM TANK T-600, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible(over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-653-9 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
500 BBL (21,000 GALLON) FIXED ROOF, 15.3 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL SLOP TANK T-610, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible(over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-654-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
500 BBL (21,000 GALLON) FIXED ROOF, 21.5 FT. DIAMETER X 8 FT. HIGH, CRUDE OIL DRAIN TANK T-700, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
12. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V= tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Allowable methods of cleaning include using water, steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

17. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible(over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever these is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

25. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

26. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

28. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-656-23 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, WITH FLUE GAS RECIRCULATION (LOCKWOOD A-2, DIS# 39579-88) (NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
3. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
4. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-658-14 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 32 FT. HIGH, CRUDE OIL TREATING TANK T-114 CONNECTED TO VAPOR CONTROL SYSTEM (LOCKWOOD DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank vapors shall only vent to vapor collection system described on permit S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 2.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lockwood Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-663-18 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEATER TREATER #V-203 AND HEAT CROSSOVER LINE TO UNFIRED HEATER TREATER SECTION, AND PERMIT EXEMPT BURNER (NATURAL GAS /LPG-FIRED, 5.0 MMBTU/HR OR LESS) (LOCKWOOD)

PERMIT UNIT REQUIREMENTS

1. Heater treater and appurtenances shall be maintained leak-free (as defined in Rule 4623) except during periods of unit maintenance or cleaning, vapor control system maintenance, and power curtailment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Inspection Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-664-13 **EXPIRATION DATE:** 05/31/2022

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEATER TREATER #V-204 (LOCKWOOD DEHY) WITH A 240 BBL VESSEL WITH PRESSURE RELIEF VENT TO S-1547-586 OR S-1547-587 AND PERMIT-EXEMPT BURNER (NATURAL GAS-FIRED, 5 MMBTU/HR OR LESS)

PERMIT UNIT REQUIREMENTS

1. This pressure vessel shall maintain working pressures sufficient to prevent organic liquid loss or VOC loss to the atmosphere at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-666-15 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEATER TREATER (#4) AND HEAT CROSSOVER LINE TO UNFIRED HEATER TREATER SECTION, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (NATIONAL)

PERMIT UNIT REQUIREMENTS

1. Heater treater and appurtenances shall be maintained leak-free (as defined in Rule 4623) except during periods of unit maintenance or cleaning, vapor control system maintenance, and power curtailment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the National Dehy Inspection Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-667-11 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH A 700 BBL VESSEL WITH PRESSURE RELIEF VENT TO S-1547-461, S-1547-463, OR S-1547-465 AND PERMIT-EXEMPT BURNER (NATURAL GAS-FIRED, 5 MMBTU/HR OR LESS)

PERMIT UNIT REQUIREMENTS

1. This pressure vessel shall maintain working pressures sufficient to prevent organic liquid loss or VOC loss to the atmosphere at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
2. This unit is subject to the National Dehy Inspection Conditions on Permit S-1547-460. Deviations from a standard condition shall be reported under the applicable condition in S-1547-460. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-683-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (W-10, DIS# 34142-93, S.N. 51106-01) (WIER #10)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
8. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District Rules 2201, 4305 and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Natural gas fuel sulfur content shall not exceed 2.8 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.008 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, or CO: 0.02 lb/MMBtu or 27 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
11. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306, 5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-684-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (DIS# 34141-93, S.N. 51106-02) (WIER #9)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
8. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District Rules 2201, 4305 and 4306, 5.1] Federally Enforceable Through Title V Permit
9. Natural gas fuel sulfur content shall not exceed 2.8 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.008 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, or CO: 0.02 lb/MMBtu or 27 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 4405, 5.] Federally Enforceable Through Title V Permit
11. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306, 5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-697-33 **EXPIRATION DATE:** 05/31/2022

SECTION: SW01 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, EQUIPPED WITH A COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#1-1A, DIS# 28617-82)

PERMIT UNIT REQUIREMENTS

1. The concentration of sulfur compounds in the exhaust from this unit shall demonstrate compliance using one of the following: test the sulfur content of each fuel source 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 Rules 2520, 9.4.2, 4301, 5.2 and Rule 480] Federally Enforceable Through Title V Permit
2. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC-quality natural gas (as defined by Rule 4320). [District Rule 4320] Federally Enforceable Through Title V Permit
4. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permitteee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320] Federally Enforceable Through Title V Permit
5. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-699-4 **EXPIRATION DATE:** 05/31/2022

SECTION: 27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
78 BHP PORTABLE EMERGENCY STANDBY DIESEL FIRED JOHN DEERE MODEL CD4239F IC ENGINE POWERING AIR COMPRESSOR (DEHY 27)

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2201; 4801, 3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7] Federally Enforceable Through Title V Permit
6. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. The equipment shall not be operated within 1000 feet of any K-12 school. [District Rule 4102]
15. Engine shall only operate within the Heavy Oil Western Stationary Source. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-700-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
78 BHP PORTABLE EMERGENCY STANDBY DIESEL FIRED JOHN DEERE MODEL 4239DF IC ENGINE POWERING AIR COMPRESSOR (DEHY 20)

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7] Federally Enforceable Through Title V Permit
6. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. The equipment shall not be operated within 1000 feet of any K-12 school. [District Rule 4102]
15. Engine shall only operate within the Heavy Oil Western Stationary Source. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-704-16 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29 **RANGE:** 21

EQUIPMENT DESCRIPTION:
TEOR OPERATION WELL VENT VAPOR CONTROL SYSTEM CONSISTING OF COMPRESSOR(S), PUMP(S), PRESSURE VESSEL(S), AND COOLERS(S) SERVING 41 STEAM DRIVE WELLS, TANKS, FREE WATER KNOCKOUTS, AND OTHER VESSELS

PERMIT UNIT REQUIREMENTS

1. Operation shall include non-condensible vapor piping from vapor recovery skids to balanced system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Collected vapors from well casing vents shall be sent to the approved incineration devices listed on this permit. Alternatively, the wells can be operated with the casing vents shut-in or collection system "balanced" by tying the casing vents together and letting the pressure balance between the well-head casing vents. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operation shall include vapor control equipment which consists of miscellaneous knockout vessels & liquid removal pumps, heat exchangers and vapor compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All produced fluids from any well served by vapor collection system which has had casing gas flow restricted or casing vent closed shall be handled only in closed production equipment served by a 99% effective vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Water/VOC condensate from all liquid knockout drums shall be pumped to the production manifold, recycled to production wells for disposal, or pumped to vapor controlled storage tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions from this equipment and shared vapor control system shall not exceed 41.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate fugitive component counts for this equipment and shared vapor control system, including vapor control system trunk line, according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Vapor control system shall handle collected vapor from the following well vent vapor collection systems and tanks: S-1547-378, '-379, '-380, '-383, '-407, '-408, '-410, '-411, '-704, '-1100, '-1101, '-1102, '-1106, '-1115, and '-1121. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Uncondensable gases shall only be controlled by one or more of the following options: 1) incineration in scrubbed steam generators S-1547-1, -3, -141, -142, -143, or -144; 2) incineration in standby flare S-1547-414; or 3) transmitted to Section 2 Dehydration facility (S-1547-888). [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-707-11 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR COLLECTION SYSTEM SERVING 37 STEAM-DRIVE CRUDE OIL PRODUCTION WELLS, LIQUID KNOCKOUT SEPARATOR(S), COOLER(S), VAPOR COMPRESSOR(S), VAPOR COLLECTION PIPING AND PIPING FROM INLET SEPARATOR VESSELS (D&E)

PERMIT UNIT REQUIREMENTS

1. Steam enhanced oil production wells connected to this TEOR system shall either vent to TEOR systemS-1547-819 or be injected into Department of Oil Gas and Geothermal Resources (DOGGR) approved well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
2. In the event of failure of any components in the vapor control system, gas flow from all wells served by this vapor control system shall be stopped by closing valve upstream of separator vessel or shall be directed through the vapor control system valves and piping which bypass the failed equipment and to the authorized steam generators. During periods when gas flow from wells is stopped, produced fluids shall be directed to tanks S-1547-843 through '-853, and '-884. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-708-10 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR COLLECTION SYSTEM SERVING SIXTY (60) STEAM ENHANCED OIL PRODUCTION WELLS. (NATIONAL)

PERMIT UNIT REQUIREMENTS

1. VOC content of the casing gas shall not exceed 10% by weight and shall be tested annually. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-709-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (3-2, DIS# 5401-72) (BELRIDGE 3-2)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 4201, 4301, 4320, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4301, 4305, 5.1, 4306, 5.1, a] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. 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
16. Formerly S-1511-7 [District Rule 2201] Federally Enforceable Through Title V Permit
17. 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
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-714-14 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
TEOR OPERATION WITH UP TO 545 STEAM ENHANCED WELLS SERVED BY WELL VENT VAPOR CONTROL SYSTEM AND SULFUR REMOVAL SYSTEM - LOST HILLS OIL FIELD (SEC. 12&13, T26S, R20E AND SEC. 18&19, T26S, R21E)

PERMIT UNIT REQUIREMENTS

1. Operation shall include fin fan heat exchangers and their associated components. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The VOC content of the gas going through the fin fan heat exchangers, sulfur treatment systems, and associated components shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Operator shall conduct quarterly gas sampling for gas going through the fin fan heat exchangers, sulfur treatment vessels, and their associated components to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. Quarterly samplings shall be reduced to annual samplings if gas samples contain VOC content equal to or less than 10% by weight for eight (8) consecutive quarterly samplings. [District NSR Rule] Federally Enforceable Through Title V Permit
4. VOC content of gas going through the fin fan heat exchanger, sulfur treatment vessels, and its associated components shall be determined by ASTM D1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain a record of the VOC content test results for the gas going through the fin fan heat exchanger, the sulfur treatment vessels, and its associated components for a period of five years and make such records available for inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Operation shall include vapor collection piping network serving District approved tanks at Lost Hills oil treatment plants. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Operation shall include vapor collection piping network serving District approved oil/water separation systems at Lost Hills oil treatment plants. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Operation shall include miscellaneous liquid knockout vessels (separators), heat exchangers, and vapor compressors. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Operation shall include vapor collection piping line interconnections and non-condensible casing gas piping to sulfur scrubbing systems. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Operation shall include at least one and no more than two sulfur scrubbing systems, each consisting of casing gas coolers and pumps, concurrent contactor vessels and separators, and chemical storage tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Sulfur scrubbing system shall use District approved scrubbing agents, including but not limited to Exxon Sulfa Check, DOW Sulferox, WESCHEM Sulfarid, SulfaScrub, SulfaTreat, Caustic-based sulfur scrubbing systems, and Betz DX-1026 Formulations. Prior District approval shall be obtained for using alternative sulfur scrubbing agents not listed. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Scrubber regenerator vessel (if applicable) and sulfur bin ventilation (if applicable) shall, at each sulfur recovery unit, be vented to one or more of the District approved steam generators connected to desulfurized casing gas piping network. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Permittee shall maintain an updated listings (updated annually within 60 days of permit anniversary) of vapor control system equipment and permitted emissions units connected to this vapor control system and such listings shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Non-condensable gas from the vapor control system shall be scrubbed by sulfur scrubbing systems prior to incineration in steam generators S-1547-787 to -796, -825, and -830, or other District approved steam generators for TEOR gas incineration. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Wells producing to vapor-controlled tanks can be operated with the casing vents closed. [District NSR Rule] Federally Enforceable Through Title V Permit
16. All produced fluids from any well served by vapor collection system which has had its casing vent closed shall be handled only in closed production equipment served by a 99% efficient vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Water/VOCs condensate from all liquid knockout drums shall be pumped to production manifold, recycled to production wells for disposal, or pumped to vapor controlled storage tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Sulfur scrubbing systems shall be maintained to achieve, on average monthly basis, at least 90% control efficiency of all H2S entering the systems. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Particulate matter (PM10) emissions from TEOR gas incineration shall not exceed 17.1 lb/day (shared with all District approved steam generators). [District NSR Rule] Federally Enforceable Through Title V Permit
20. Emissions of Volatile Organic Compounds (VOC) shall not exceed 1,198.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using USEPA's 1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017), or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Permittee shall maintain accurate daily records of gas sulfur content of non-condensable gas entering and leaving sulfur scrubbing systems to verify removal efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
23. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), formerly District Rule 465.1, excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
26. Note: Formerly S-1511-22 [District Rule 2201] Federally Enforceable Through Title V Permit
27. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-719-13 **EXPIRATION DATE:** 05/31/2022

SECTION: NE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR GAS FIRED STEAM GENERATOR, WITH NORTH AMERICAN MODEL 4131G LO-NOX BURNER ASSEMBLY, CUSTOM FABRICATED FLUE GAS RECIRCULATION, AND OXYGEN ANALYZER/CONTROLLER. (#2-1D) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Emissions from gaseous fired units shall not exceed 200 lb sulfur compounds/hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural; 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 Rules 4301, 5.2.1, and 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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

10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

14. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

15. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

16. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

17. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.3.2, 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Emissions rates shall not exceed any of the following: PM-10 0.005 lb/MMBtu, SO2 0.002 lb/MMBtu, NOx 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC 0.003 lb/MMBtu, and CO 1.3 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
20. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of daily quantity, higher heating value and sulfur content of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
23. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
24. The acceptable settings for the flue gas recirculation valve shall be established by testing emissions from this unit or other representative units as approved by the District. The acceptable settings shall be those for which compliance with applicable NOx and CO emissions rates have been demonstrated through source testing. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
25. The flue gas recirculation valve settings shall be inspected at least on a weekly basis. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
26. The permittee shall maintain records of the date and time of flue gas recirculation valve settings, and the observed setting. The records must also include a description of any corrective action taken to maintain the flue gas recirculation valve setting to within the acceptable range. These records shall be retained at the facility for a period of no less than 2 years and shall be made available for District inspection upon request. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit
27. If the flue gas recirculation valve setting deviates from the acceptable range, the permittee shall notify the District and take corrective action within one (1) hour after detection. If the flue gas recirculation valve settings are not corrected promptly, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emissions limits at the observed flue gas recirculation valve settings. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
28. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081; 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
29. Formerly S-1511-32 [District Rule 2201]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-722-24 **EXPIRATION DATE:** 05/31/2022

SECTION: SW01 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL #QLN-ULN 3.2 LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR) (#1-1C, BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules2520, 9.4.2, 4301, 5.2.1 and 4801.3.] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC-quality natural gas (as defined by Rule 4320). [District Rule 4320] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following limits: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.014 lb/MMBtu or 12 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following limits: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 7495 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
16. During a "shakedown" period not to exceed 60 calendar days from initial operation of the modifications authorized by this ATC, NOx emission shall not exceed 15 ppmvd NOX @ 3% O2 or 0.018 lb-NOX/MMBtu. The shakedown period shall be concluded prior to the applicable Rule 4320 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation for at least 5 years. [District Rule 4320] Federally Enforceable Through Title V Permit
17. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of initial operation under this ATC. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. Formerly S-1511-47 [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-723-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN 3.2 LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM (#2-5D) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. If Rule 4320 fee option is selected, permittee shall provide to the District at least (7) calendar days advance notice and pay the applicable fees prior to recommencing operation. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If Rule 4320 fee option is not selected, this unit shall not be re-started unless it has been tuned or retrofitted to meet the applicable Rule 4320 NOx limit. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
17. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Formerly S-1511-48 [District Rule 2201]
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-725-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SW01 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS STEAM GENERATOR WITH A COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#1-1B) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and 4801.3] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
8. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4201, 4301, 4305, 4306, 4] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District NSR Rule] Federally Enforceable Through Title V Permit
10. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Formerly S-1511-50 [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-726-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#3-2P) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until fees have been paid pursuant to sections 5.1.2, 5.2.5, and 5.3, and/or an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Unit shall be equipped with the following: natural gas volume flowmeter, TEOR non-condensible gas volume flowmeter, and continuous operation flue gas oxygen monitor/controller. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
10. Steam generator shall be equipped with a programmable logic controller (PLC). [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
16. When fired exclusively on natural gas, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit
17. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
18. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
19. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
20. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 2201 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
22. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Note: Formerly S-1511-53 [District Rule 2201] Federally Enforceable Through Title V Permit
24. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-727-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR EQUIPPED WITH A COEN MODEL #QLN-ULN 3.2 LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN OXYGEN ANALYZER/CONTROLLER (#3-2A) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be operated at no greater than 1,466.7 MMBtu/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of daily quantity, higher heating value and sulfur content of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
13. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Formerly S-1511-54 [District Rule 2201] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-728-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (3-2B) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of daily quantity, higher heating value and sulfur content of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

13. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit

14. Note: Formerly S-1511-55 [District Rule 2201] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-729-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR STRUTHERS GAS FIRED STEAM GENERATOR, WITH A COEN MODEL ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND OXYGEN ANALYZER/CONTROLLER. (#3-2K, DIS #5406-74) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until fees have been paid pursuant to sections 5.1.2, 5.2.5, and 5.3, and/or an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
8. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
10. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 2520, 9.4.2 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rules 2520, 9.4.2 and 4320] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228; and methane content: ASTM D1945. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; 4306, 6.2.1; 4320, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera) 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. 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), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit

19. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

20. Permittee shall maintain records of daily quantity, higher heating value and sulfur content of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406, 4801, and Kern County Rule 424] Federally Enforceable Through Title V Permit

22. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4405, and Kern County Rule 425] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Emission rates during startup, shutdown and refractory curing shall not exceed: particulate matter - 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit

24. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

25. Duration of startup and shutdown (as defined in Rule 4320) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

26. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

27. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100 (amended December 17, 1992), the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320, 5.8.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit

32. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

33. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

34. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

35. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, 4305, 6.2, 4306, and 4320] Federally Enforceable Through Title V Permit

36. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

37. All records shall be maintained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

38. Formerly S-1511-58

39. 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

40. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-733-19 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#2-3F) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
9. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228; and methane content: ASTM D1945. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
12. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Emissions from this unit shall not exceed 0.005 lb-PM10/MMBtu. [District Rules 2201, 4201, and 4301] Federally Enforceable Through Title V Permit
14. When fired exclusively on natural gas emissions from this unit shall not exceed 0.002 lb-SOx/MMBtu (as SO2). [District Rules 2201, 4301, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
15. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
16. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day. [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
18. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Formerly S-1511-65 [District Rule 2201] Federally Enforceable Through Title V Permit
22. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-11] Federally Enforceable Through Title V Permit
23. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in the conditions below. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 78-11] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions below, and the methods utilized to restore normal operations. [PSD SJ 78-11] Federally Enforceable Through Title V Permit

25. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 78-11] Federally Enforceable Through Title V Permit

26. All correspondence as required by this permit shall be forwarded to Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [District Rule 2410] Federally Enforceable Through Title V Permit

27. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-734-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND OXYGEN ANALYZER/CONTROLLER. (#3-2L) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
13. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Formerly S-1511-66 [District Rule 2201] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-735-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND OXYGEN ANALYZER/CONTROLLER. (#3-2L) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and TEOR non-condensible gas volume flowmeter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
7. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Emissions from this unit shall not exceed 0.005 lb-PM10/MMBtu. [District Rules 2201, 4201, and 4301] Federally Enforceable Through Title V Permit
10. When fired exclusively on natural gas emissions from this unit shall not exceed 0.002 lb-SOx/MMBtu (as SO2). [District Rules 2201, 4301, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When fired on natural gas and TEOR gas, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: NOx (as NO2): 52.8 lb/day or 5889 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit
16. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Formerly S-1511-67 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-736-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN LOW-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (BELRIDGE #3-2E)

PERMIT UNIT REQUIREMENTS

1. Unit shall be equipped with the following: natural gas volume flowmeter and TEOR non-condensible gas volume flowmeter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
5. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
6. Emissions from this unit shall not exceed 0.005 lb-PM10/MMBtu. [District Rules 2201, 4201, and 4301] Federally Enforceable Through Title V Permit
7. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
9. When fired exclusively on natural gas emissions from this unit shall not exceed 0.002 lb-SOx/MMBtu (as SO2). [District Rules 2201, 4301, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
10. Emissions from this unit shall not exceed any of the following limits: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @3% O2, VOC: 0.003 lb/MMBtu or CO: 40 ppmv @ 3% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed any of the following: NOx (as NO2): 52.8 lb/day or 5889 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

13. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2 and 4305, 6.3] Federally Enforceable Through Title V Permit

14. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit

15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

16. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

17. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

18. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

19. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit

20. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit

21. Formerly S-1511-68 [District Rule 2201] Federally Enforceable Through Title V Permit

22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-737-18 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN LOW-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (BELRIDGE #3-2G)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and TEOR non-condensible gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
7. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
8. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Emissions from this unit shall not exceed 0.005 lb-PM10/MMBtu. [District Rules 2201, 4201, and 4301] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emissions from this unit shall not exceed 0.002 lb-SOx/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, 4801] Federally Enforceable Through Title V Permit

12. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

13. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit

14. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit

15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit

16. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit

17. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit

18. Formerly S-1511-69 [District Rule 2201] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-738-18 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#3-2F) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and a TEOR non-condensible gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
9. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
13. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit
16. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Formerly S-1511-70 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-742-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER, A FLUE GAS RECIRCULATION SYSTEM AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359 (#3-2H) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and a TEOR non-condensible gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
7. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
8. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
9. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
12. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit
15. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Formerly S-1511-81 [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-743-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR EQUIPPED WITH A COEN QLN-ULN LOW-NOX BURNER, JOHN ZINK/TODD COOL FUEL SYSTEM, AND FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#3-2I) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 4301, and 4801] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and TEOR non-condensible gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
9. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
10. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rule 4320] Federally Enforceable Through Title V Permit

12. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

13. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

14. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit

15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit

16. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070, and Rule 25] Federally Enforceable Through Title V Permit

17. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit

18. Formerly S-1511-82 [District Rule 2201] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-744-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS- FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3G) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When fired exclusively on natural gas emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit

13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit

16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Formerly S-1511-83 [District Rule 2201] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-745-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN 3.2 LOW-NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3A) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
8. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
10. When fired exclusively on natural gas emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
11. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.014 lb/MMBtu or 12 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
14. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Formerly S-1511-84 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-746-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER ASSEMBLY, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3B) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
9. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
11. When fired exclusively on natural gas emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
15. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-747-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3C) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1, 4320] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emission rates shall not exceed the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District NSR Rule, 2520, 4201, 4301, 4406, and 480] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4301, 4305, 4306, 4320, a] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District NSR Rule, 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Formerly S-1511-86 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-748-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN ULTRA LOW-NOX BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359 (#2-3D) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and 4801.3] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emission rates shall not exceed the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day. [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Formerly S-1511-87 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-749-24 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH COEN QLN-ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3E) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 4301, and Rule 4801] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. When fired exclusively on natural gas emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day. [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Formerly S-1511-88 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-751-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN MODEL #QLN-ULN 3.2, FLUE GAS RECIRCULATION (FGR) SYSTEM (SHALE #5) (NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu or VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: VOC: 4.5 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-754-25 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN ULN BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#2-5A) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. If Rule 4320 fee option is selected, permittee shall provide to the District at least (7) calendar days advance notice and pay the applicable fees prior to recommencing operation. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If Rule 4320 fee option is not selected, this unit shall not be re-started unless it has been tuned or retrofitted to meet the applicable Rule 4320 NOx limit. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
10. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District NSR Rule] Federally Enforceable Through Title V Permit
18. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306] Federally Enforceable Through Title V Permit
19. If periodic determination of FGR rate by O2 measurement is utilized, the flue gas recirculation rate shall be determined at least on a weekly basis by measuring the stack O2% by volume (Os), and windbox O2% by volume (Ow) using the following equation: FGR rate = {Ow - 20.9)/(Os - 20.9)} x 100%. 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 week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. If periodic determination of FGR rate by O2 measurement is utilized, the minimum flue gas recirculation rate shall be established by source testing this unit or other representative units per Rule 4305 and as approved by the District. The normal range/level shall be no lower than the minimum flue gas recirculation rate with which compliance with applicable NOx and CO emission limits has been demonstrated through source testing at a similar firing rate. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. If periodic determination of FGR rate by O2 measurement is utilized, and the flue gas recirculation rate is less than the normal range/level, the permittee shall return the flue gas recirculation rate to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the flue gas recirculation rate is not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new flue gas recirculation rate. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. If periodic determination of FGR rate by O2 measurement is utilized, the permittee shall maintain records of the date and time of oxygen concentration measurements, the measured oxygen concentrations, the calculated flue gas recirculation rate, and the firing rate at the time of the oxygen concentration measurements. The records shall also include a description of any corrective action taken to maintain the flue gas recirculation rate within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

23. If monitoring of burner mechanical adjustments and O2 concentration is utilized, the stack O2 concentration measurement and inspection of [list mechanical adjustments/settings] shall be conducted at least on a weekly basis. 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 week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

24. If monitoring of burner mechanical adjustments and O2 concentration is utilized, the normal range/level of stack O2 concentration and visible mechanical burner settings shall be established by source testing this unit or other representative units per Rule 4305 and as approved by the District. The normal range/level shall be that for which compliance with applicable NOx and CO emission limits has been demonstrated through source testing at a similar firing rate. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

25. If monitoring of burner mechanical adjustments and O2 concentration is utilized, normal range or level for the stack O2 concentration and burner mechanical settings shall be re-established during each source test required by this permit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

26. If monitoring of burner mechanical adjustments and O2 concentration is utilized, and either the stack O2 concentration or visible mechanical burner settings are less than the normal range/level, the permittee shall return the stack O2 concentration and visible mechanical burner settings to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the stack O2 concentration and visible mechanical burner settings are not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour, and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new stack O2 concentration and visible mechanical burner settings. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

27. If monitoring of burner mechanical adjustments and O2 concentration is utilized, the permittee shall maintain records of the date and time of O2 measurements and burner adjustments, the measured O2 concentrations (% by volume) and firing rate at the time of O2 measurement, and the observed setting(s) for the burner. The records must also include a description of any corrective action taken to maintain the O2 concentration and the burner mechanical settings within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

28. If periodic determination of FGR rate by O2 measurement or monitoring of burner mechanical adjustments and O2 concentration is utilized, during the 36-month source testing interval, the owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). Semi-annual tuning is not required if emissions are monitored monthly with a portable analyzer. [District Rule 4306] Federally Enforceable Through Title V Permit

29. If periodic determination of FGR rate by O2 measurement or monitoring of burner mechanical adjustments and O2 concentration is utilized, and the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

30. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit

31. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

32. Note: Formerly S-1511-110 [District Rule 2201]

33. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-755-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#2-5B) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. If Rule 4320 fee option is selected, permittee shall provide to the District at least (7) calendar days advance notice and pay the applicable fees prior to recommencing operation. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If Rule 4320 fee option is not selected, this unit shall not be re-started unless it has been tuned or retrofitted to meet the applicable Rule 4320 NOx limit. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
17. During a "shakedown" period not to exceed 60 calendar days from initial operation of the modifications authorized by this ATC, NOx emission rate shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. The shakedown period shall be concluded prior to the applicable Rule 4306 compliance deadline selected for this unit. Permittee shall maintain a record of the date of initial operation and shall make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
18. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Note: Formerly S-1511-111 [District Rule 2201]
21. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-756-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (#2-5C, BELRIDGE) WITH FLUE GAS RECIRCULATION AND COEN QLN-ULN 3.2 LOW-NOX BURNER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This unit may be designated as a dormant emissions unit or an active emissions unit. The permittee shall notify the District's Compliance Division by US mail, email or Fax upon redesignating the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. If Rule 4320 fee option is selected, permittee shall provide to the District at least (7) calendar days advance notice and pay the applicable fees prior to recommencing operation. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If Rule 4320 fee option is not selected, this unit shall not be re-started unless it has been tuned or retrofitted to meet the applicable Rule 4320 NOx limit. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. If this unit has been designated as dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4305 and 4306] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Note: Formerly S-1511-112 [District Rule 2201]
19. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-757-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION (#2-5J) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit
7. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
8. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
12. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Note: Formerly S-1511-114 [District Rule 2201] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-758-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW-NOX BURNER AND FLUE GAS RECIRCULATION (#2-5G) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is implemented that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4201, 4301, 4305, 4306, 4] Federally Enforceable Through Title V Permit

13. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District NSR Rule] Federally Enforceable Through Title V Permit

14. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

16. Note: Formerly S-1511-115 [District Rule 2201]

17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-759-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH FLUE GAS RECIRCULATION (#2-5H) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
5. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
6. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SO2: 0.002 lb/MMBtu, NOx: 0.011 lb/MMBtu or 9 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO 40 ppmv @ 3% O2 . [District Rules 2201and 4305, 5.1] Federally Enforceable Through Title V Permit
8. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed any of the following: NOx (as NO2): 52.8 lb/day or 5889 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 4305, 6.3.2] Federally Enforceable Through Title V Permit
14. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input , make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305,6.3.2] Federally Enforceable Through Title V Permit
15. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
16. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
17. Note: Formerly S-1511-116 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, and Source Testing Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-760-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION, COEN QLN-ULN BURNER AND JOHN ZINK/TODD COOL FUEL SYSTEM AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3G) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320, 3.7 and 5.2] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320, 5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320, 5.4] Federally Enforceable Through Title V Permit
12. When fired exclusively on natural gas emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Formerly S-1511-117 [District Rule 2201] Federally Enforceable Through Title V Permit
20. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-11] Federally Enforceable Through Title V Permit
21. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in the conditions below. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 78-11] Federally Enforceable Through Title V Permit
22. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions below, and the methods utilized to restore normal operations. [PSD SJ 78-11] Federally Enforceable Through Title V Permit
23. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 78-11] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. All correspondence as required by this permit shall be forwarded to: a) Director, Air Management Division, Compliance Section (Attn: A-3-3), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; and c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726. [PSD SJ 78-11] Federally Enforceable Through Title V Permit

25. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-761-26 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#3-2M) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with the following: natural gas volume flowmeter and a TEOR non-condensible gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320] Federally Enforceable Through Title V Permit
10. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
12. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
14. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070] Federally Enforceable Through Title V Permit
16. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
17. NOTE: Formerly S-1511-118 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-762-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN ULTRA LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#3-2N) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until fees have been paid pursuant to sections 5.1.2, 5.2.5, and 5.3, and/or an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
8. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
10. 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 has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 2520, 9.4.2 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, the following test methods (or other approved methods listed in this permit) shall be used; H2S: ASTM D6228 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory; total sulfur: ASTM 1072, D3246, D4084 or D6228; and methane content: ASTM D1945. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; 4306, 6.2.1; 4320, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera) 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. 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), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rules 2520, 9.4.2, 4305, 6.3, 4306, and 4320] Federally Enforceable Through Title V Permit

19. Unit shall be equipped with the following: natural gas volume flowmeter, TEOR non-condensible gas volume flowmeter, and continuous operation flue gas oxygen monitor/controller. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Steam generator shall be equipped with a programmable logic controller (PLC). [District Rule 4305] Federally Enforceable Through Title V Permit

21. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

25. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320 and Kern County Rule 424] Federally Enforceable Through Title V Permit

26. When fired exclusively on natural gas emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406, 4801, and Kern County Rule 424] Federally Enforceable Through Title V Permit

27. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201, and 4301] Federally Enforceable Through Title V Permit

28. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4405, and Kern County Rule 425] Federally Enforceable Through Title V Permit

29. Emission rates during startup, shutdown and refractory curing shall not exceed: particulate matter - 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit

30. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day. [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit

31. Duration of startup and shutdown (as defined in Rule 4320) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

32. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

33. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100 (amended December 17, 1992), the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

35. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.1] Federally Enforceable Through Title V Permit

36. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320, 5.8.2] Federally Enforceable Through Title V Permit

37. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit

38. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

39. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

40. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. 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

41. 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 6.2, 4306, and 4320] Federally Enforceable Through Title V Permit

42. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

43. All records shall be maintained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

45. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359.

46. Formerly S-1511-119

47. 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

48. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-763-15 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (MOCO #802) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
4. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
5. Formerly S-1511-120 [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-764-15 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (MOCO #804) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
4. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
5. Formerly S-1511-121 [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-765-14 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (MOCO #806) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. This generator is approved to operate at the following locations: SE Sec. 35, T12N, R24W and SE Sec. 14, T31S, R22E [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-766-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #604) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Formerly S-1511-123 [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-767-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH COEN QLN-ULN BURNER AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819 (MOCO #605) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-124 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-768-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #606) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-125 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-769-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #607) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-126 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-770-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH COEN ULN BURNER, FLUE GAS RECIRCULATION AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #608) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from this unit, except during startup, shutdown, and refractory curing, shall not exceed any of the following limits: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 50 ppmv @ 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. PM-10 emissions from the combustion of natural gas in this permit unit shall not exceed 0.005 lb/MMBTU. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Sulfur compound emissions (as SO2) from the combustion of natural gas in this permit unit shall not exceed 0.002 lb/MM Btu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
16. Formerly S-1511-127 [District Rule 2201] Federally Enforceable Through Title V Permit
17. 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
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-771-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #701) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-128 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-772-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #702) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-129 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-777-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #505) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Formerly S-1511-134 [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-778-24 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A GIDEON MODEL MGW-63R1 LOW NOX BURNER, FLUE GAS RECIRCULATION AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819, MOCO (#506) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions (as SO2) and PM10 emissions from the combustion of well vent vapors from S-1547-819 in this steam generator and all other devices authorized to combust such vapors shall not exceed the limits established on S-1547-819. [District Rules 2201, 4201, 3.1 and 4301, 5.1, 5.2.] Federally Enforceable Through Title V Permit
11. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.0146 lb/MMBtu or 12 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 7994 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
15. Formerly S-1511-135 [District Rule 2201] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-779-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819. (MOCO #703) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
16. Formerly S-1511-136 [District Rule 2201] Federally Enforceable Through Title V Permit
17. 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
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-780-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819, (MOCO #704) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201; PSD SJ 89-01] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
16. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
17. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
18. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
19. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
20. Note: Formerly S-1511-137 [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-781-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NW35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND PIPING FROM TEOR WELL VENT VAPOR RECOVERY SYSTEM S-1547-819, (MOCO #705) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201; PSD SJ 89-01] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
14. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
16. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
17. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
18. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
19. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
20. Note: Formerly S-1511-138 [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-782-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (#11-1A) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. Operator shall notify the District in writing prior to recommencing operation of this dormant emissions unit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4306] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
7. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
17. Note: Formerly S-1511-140 [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-783-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH A COEN QLN-ULN ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION (#11-1B) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
6. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1; 4306, 5.1] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
9. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
12. Note: Formerly S-1511-141 [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-784-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN BURNER, WITH FLUE GAS RECIRCULATION (#11-1C) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
2. Operator shall notify the District in writing prior to recommencing operation of this dormant emissions unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4306] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
16. Note: Formerly S-1511-142 [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-785-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29E **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH FLUE GAS RECIRCULATION (#11-1D) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
9. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
12. Note: Formerly S-1511-143 [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-786-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR EQUIPPED WITH A COEN QLN-ULN LOW-NOX BURNER, AND FLUE GAS RECIRCULATION (#11-1E) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 6.2; 4306, 6.2] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10: 7.3 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 52.8 lb/day or 9636 lb/year, or CO: 44.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
9. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
12. Note: Formerly S-1511-144 [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-787-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL ULN LOW NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSABLE VAPOR PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (#401A) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District at least (7) days prior to designating this emissions unit as dormant or reactivating this unit from dormant status. [District Rule 4320] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all sources of fuel gas entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
11. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320, 3.7 and 5.2] Federally Enforceable Through Title V Permit
15. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
16. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320, 6.1] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Formerly S-1511-149 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-788-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL ULN LOW NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSABLE VAPOR PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (#401B) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District at least (7) days prior to designating this emissions unit as dormant or reactivating this unit from dormant status. [District Rule 4320] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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, 9.4.2, 4301, 5.2.1 and 4801.3.] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
11. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
16. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
21. Formerly S-1511-149 [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-789-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN ULTRA LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (#401C) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District at least (7) days prior to designating this emissions unit as dormant or reactivating this unit from dormant status. [District Rule 4320] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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, 9.4.2, 4301, 5.2.1 and 4801.3.] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
12. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
14. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
18. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-790-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714 AND SULFUR SCRUBBER '-1211 (#401D) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320, 3.7 and 5.2] Federally Enforceable Through Title V Permit
7. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
8. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
9. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
14. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
20. Formerly S-1511-151 [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-791-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN QLN-II ULTRA LOW NOX BURNER, A FLUE GAS RECIRCULATION (FGR) SYSTEM, AND A NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714 AND SULFUR SCRUBBER '-1211 (#401E) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
11. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
14. VOC emission rates shall not exceed 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. Formerly S-1511-152 [District Rule 2201] Federally Enforceable Through Title V Permit
23. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-792-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (#401F) (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source 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 4320] Federally Enforceable Through Title V Permit
5. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
16. FGR shall be operated in the open position at all times unless source testing pursuant to District Rule 1081 demonstrates compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. Formerly S-1511-153 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-793-18 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR (401G) WITH NORTH AMERICAN LO-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714 - LOST HILLS 2 LEASE

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. 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
5. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
6. FGR shall be operated in the open position at all times unless source testing pursuant to District Rule 1081 demonstrates compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

10. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

11. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

12. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit

13. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit

16. When fired exclusively on natural gas, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

17. Emissions from this unit shall not exceed any of the following limits: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 50 ppmv @ 3% O2. [District NSR Rule] Federally Enforceable Through Title V Permit

18. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201, 4301, and 4320] Federally Enforceable Through Title V Permit

20. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

21. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
23. Permittee shall perform District-witnessed or -approved fuel gas sulfur analysis of non-TEOR gas combusted in the unit on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of daily quantity of natural gas/vapor recovery gas consumed and annual sulfur analyses of vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
27. Note: Formerly S-1511-154 [District Rule 2201] Federally Enforceable Through Title V Permit
28. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-794-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER, FLUE GAS RECIRCULATION WITH PLC CONTROL, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714 (401H) (LOST HILLS 2 LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, , VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District NSR Rule and District Rules 2520, 9.1, 42] Federally Enforceable Through Title V Permit
13. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
15. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
16. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
17. Permittee shall perform District-witnessed or approved fuel gas sulfur analysis of non-TEOR gas combusted in the unit on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized. Sample collection shall be by an ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of daily quantity of natural gas/vapor recovery gas consumed and annual sulfur analyses of vapor recovery gas burned in this steam generator. [District Rule 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1070, District NSR Rule] Federally Enforceable Through Title V Permit
21. Formerly S-1511-155 [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-795-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH GIDEON MGW-63V2 ULTRA LOW-NOX BURNER, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (401I) (LOST HILLS 2 LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
12. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
14. When fired exclusively on natural gas, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
16. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall perform District-witnessed or -approved fuel gas sulfur analysis of non-TEOR gas combusted in the unit on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
19. FGR shall be operated in the open position at all times unless source testing pursuant to District Rule 1081 demonstrates compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of daily quantity of natural gas/vapor recovery gas consumed and annual sulfur analyses of vapor recovery gas burned in this steam generator. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. Formerly S-1511-156 [District Rule 2201] Federally Enforceable Through Title V Permit
24. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-796-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH COEN QLN-ULN LOW-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION WITH PLC CONTROL, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-714. (401J) (LOST HILLS 2 LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, , VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
11. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
15. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall perform District-witnessed, or approved fuel gas sulfur analysis of non-TEOR gas combusted in the unit on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of daily quantity of natural gas/vapor recovery gas consumed and annual sulfur analyses of vapor recovery gas burned in this steam generator. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
21. Formerly S-1511-157 [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-797-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL ULN BURNER AND WITH FLUE GAS RECIRCULATION (FGR) AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-819 (MOCO 603) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and TEOR well vent vapors from well vent vapor control system S-1547-819 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When combusting a combination of natural gas and vapor recovery gas, the fuel gas sulfur content shall not exceed 5 grains of total sulfur (as H2S) per 100 dscf of fuel gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total TEOR gas from permit S-1547-819 incinerated in steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate daily records of gas flowrate delivered to steam generators S-1547-766 to '-772, '-777 to '-781, and '-797. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total PM10 emissions for steam generators S-1547-766 to '-772, '-777 to '-781, and '-797 shall not exceed 129.1 lb/day nor 47,122 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing from the combustion of natural gas, shall not exceed any of the following: PM10: 0.005 lb/MMBTU or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, 4320,] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 7.2 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, or CO: 43.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. 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
15. Operator shall provide an annual fuel sulfur content analysis to the District upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
16. Note: Formerly S-1511-166 [District Rule 2201] Federally Enforceable Through Title V Permit
17. 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
18. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-798-18 **EXPIRATION DATE:** 05/31/2022

SECTION: SW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM (SHALE #2) (NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Formerly S-1511-167 [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-799-19 **EXPIRATION DATE:** 05/31/2022

SECTION: SW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM (SHALE #3, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 7.5 lb/day, NOx (as NO2): 51 lb/day or 9461 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
16. Formerly S-1511-168 [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-800-18 **EXPIRATION DATE:** 05/31/2022

SECTION: SW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM [SHALE #4, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu or CO: 40 ppmv @ 3% O2. [District Rule 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Formerly S-1511-169 [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-801-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN-ULN BURNER AND FLUE GAS RECIRCULATION (SHALE #6, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
12. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: VOC: 7.5 lb/day, NOx (as NO2): 51.0 lb/day or 9461 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
15. Formerly S-1511-171 [District Rule 2201] Federally Enforceable Through Title V Permit
16. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
17. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
18. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
19. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
20. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-802-26 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED STEAM GENERATOR (11-1G, BELRIDGE) WITH FLUE GAS RECIRCULATION AND COEN QLN-ULN 3.2 LOW-NOX BURNER

PERMIT UNIT REQUIREMENTS

1. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
2. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
3. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 5.7 and 6.2] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 4301, 5.2 and Rule 4801, 3.1] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. Steam generator shall be equipped with an operational fuel gas volumetric flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. When TEOR gas is connected to this unit, steam generator shall be equipped with an operational volumetric TEOR gas flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall notify the District, in writing, at least 15 days prior to burning TEOR gas and when discontinuing the burning of TEOR gas. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu or CO: 40 ppmv @ 3% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 5782 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 4305, 6.3.2] Federally Enforceable Through Title V Permit
18. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input , make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305,6.3.2] Federally Enforceable Through Title V Permit
19. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
20. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
21. Formerly S-1511-172 [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, and Source Testing Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-803-20 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH A COEN QLN-ULN LOW-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359 (BELRIDGE #3-2O)

PERMIT UNIT REQUIREMENTS

1. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
2. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201, and 4301] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4301, 4305, 4306, and 440] Federally Enforceable Through Title V Permit
10. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 46.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day [District NSR Rule, 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit
12. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
13. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070] Federally Enforceable Through Title V Permit
14. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Formerly S-1511-181 [District Rule 2201] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-804-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE 27 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (MAXWELL #4) (NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper cap or restrictor plate without a stanchion ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. This unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum heat input to steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
12. Emission rates, including startup, shutdown, and refractory curing, shall not exceed any of the following: VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9,461 lb/year, CO: 43.2 lb/day, PM10: 7.2 lb/day, or SOx: 2.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
15. Note: Formerly S-1511-185 [District Rule 2201] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-805-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FINLEY #9, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201; PSD SJ 89-02] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
13. Formerly S-1511-186 [District Rule 2201] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-806-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FINLEY #10, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with an operational fuel gas volumetric flow meter . [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201; PSD SJ 89-02] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.5 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. Formerly S-1511-187 [District Rule 2201] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-807-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN ULTRA LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM. (#2-5E) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This steam generator is also approved to operate at SW/4 Sec. 01, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Unit shall be equipped with natural gas volume flowmeter and flue gas oxygen monitor/controller. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Steam generator shall be equipped with a programmable logic controller (PLC). [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
10. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Steam generator shall be fired with natural gas or field gas, with sulfur content (as H2S) not to exceed 15 ppmv. [District Rules 2201; 4301, 5.2; 4406, 4,2 and 4801] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SO2 - 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305; 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. Permittee shall maintain daily records of fuel type, annual fuel sulfur analyses and daily volumes of fuel gas fired in this steam generator. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. Note: Formerly S-1511-188 [District Rule 2201]
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-808-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION (#11-1H) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
2. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
3. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4305, 6.2; 4306, 6.2 and 4320, 6.2] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational fuel gas volumetric flow meter . [District NSR Rule] Federally Enforceable Through Title V Permit
5. When TEOR gas is connected to this unit, steam generator shall be equipped with an operational volumetric TEOR gas flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Permittee shall notify the District, in writing, at least 15 days prior to burning TEOR gas and when discontinuing the burning of TEOR gas. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10 - 0.005 lb/MMBtu; SOx (as SO2) - 0.002 lb/MMBtu; VOC - 0.003 lb/MMBtu; NOx (as NO2) - 0.011 lb/MMBtu or 9 ppmv @ 3% O2; or CO - 0.030 lb/MMBtu or 40.0 ppmv @ 3% O2. [District NSR Rule and District Rules 4201, 4301, 4] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: PM10 - 7.5 lb/day; SOx (as SO2) - 3.0 lb/day; VOC - 4.5 lb/day; NOx (as NO2) - 51.0 lb/day or 6023 lb/year; or CO - 45.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Note: Formerly S-1511-189 [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit
18. 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
19. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-809-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SW01 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED C.E. NATCO STEAM GENERATOR, WITH A COEN MODEL ULN LOW NOX BURNER, FLUE GAS RECIRCULATION AND OXYGEN ANALYZER/CONTROLLER. (#1-1D) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2 and Rule 480] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The total gas fired in this unit, on amonthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
6. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
7. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320] Federally Enforceable Through Title V Permit
8. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Formerly S-1511-190 [District Rule 2201] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-810-16 **EXPIRATION DATE:** 05/31/2022

SECTION: SW25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-824, (NEV #104) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter . [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Formerly S-1511-191 [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-811-19 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM (MAXWELL #5) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
6. This unit is approved to operate at the following locations: SE35/T12N/R24W and NE27/T31S/R22E. [District Rule 4102] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Steam generator shall be equipped with operational vapor recovery gas volumetric flow meter whenever unit is connected to the vapor recovery gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Unit may be disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter removed (or replaced). Permittee shall keep a written record of the date(s) when the unit is disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter is removed (or replaced). [District Rule 1080] Federally Enforceable Through Title V Permit
11. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
15. Formerly S-1511-193 [District Rule 2201] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-812-17 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS (AND VAPOR RECOVERY GAS) FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN BURNER AND FLUE GAS RECIRCULATION (MOCO #807) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational vapor recovery gas volumetric flow meter whenever unit is connected to the vapor recovery gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Unit may be disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter removed (or replaced). Permittee shall keep a written record of the date(s) when the unit is disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter is removed (or replaced). [District Rule 1080] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following limits: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
10. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
12. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
13. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
14. Formerly S-1511-194 [District Rule 2201] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-819-12 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
TEOR OPERATION W/ UP TO 900 STEAM DRIVE WELLS SERVED BY WELL CASING VENT VAPOR CONTROL AND CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions from all components associated with this operation shall not exceed 410.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain for a period of five years, accurate records of fugitive inspection component counts, leak screening values in excess of 10,000 ppm, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operation shall include liquid knockout vessels (separators), heat exchangers, and vapor compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation shall include vapor collection piping network from well vent vapor control system and tank battery vapor control system S-1547-843 to sulfur scrubbing systems (primary & standby). [District Rule 2201] Federally Enforceable Through Title V Permit
5. Primary sulfur scrubbing system shall include casing gas coolers and pumps, contactor vessels and separators, regenerator section with heat exchangers, recirculation pump & air blower, and chemical storage tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Standby sulfur scrubbing system shall include contactor vessels and separators. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sulfur scrubbing system(s) shall use District approved scrubbing agents including, Exxon Sulfa Check, DOW Sulferox, WESCHEM Sulfarid, SulfaScrub, and Betz DX-1026 Formulations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Prior District approval shall be obtained for using alternative sulfur scrubbing agents other than those listed above. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Casing vapor collection system shall be equipped with vapor flow rate indicator/recorder downstream of condensation and sulfur removal equipment measuring total non-condensible vapor flow rate. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All wells approved by this permit shall have the well head casing vents routed to the TEOR well vent vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Well casing vents may be closed provided produced fluids are handled only in production facilities with District-approved emission control systems achieving at least 99% control. [District Rule 2201 and District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. An inspection and maintenance program consistent with Rule 4403 for light oil production facilities shall be implemented for stuffing boxes and polish rods of 479 newly authorized steam drive wells (identified by well roster). [District Rule 2201] Federally Enforceable Through Title V Permit

13. Sulfur bin ventilation (if applicable) shall be vented to one or more of the District approved steam generators connected to desulfurized casing gas piping network. [District Rule 2201] Federally Enforceable Through Title V Permit

14. During temporary periods of maintenance covered in the permittee's bi-annual maintenance plan the permittee may conduct maintenance or repair activities contained in the District approved bi-annual maintenance plan without shutting-in production from wells served by the well vent vapor collection system, for no more than a total of 336 hours during any one calendar year for each system. Maintenance covered by the permittee's bi-annual maintenance plan may exceed 336 hours during any one calendar year when maintenance is performed while all casing well vents covered by this permit are closed. When multiple vapor recovery systems serve the same wells in series or in parallel, a total of 336 hours of maintenance shall be allowed for all systems combined. [District Rule 2201] Federally Enforceable Through Title V Permit

15. During temporary periods of maintenance covered in the permittee's bi-annual maintenance plan, well vent vapor recovery piping may be temporarily shut-in or isolated for routine maintenance or repair activities without closing the well vents normally served by a well vent vapor collection system provided that well vent vapors are routed to a vapor recovery system that complies with District rule 4401and all otherwise applicable provisions of this permit. [District Rule 2201 and District Rule 4401] Federally Enforceable Through Title V Permit

16. Well vent vapor collection system piping and components shall be maintained as required by Rule 4401, and well vent vapors shall not be vented or bled-off to the atmosphere except for those actions necessary to safely isolate vessels and piping for routine maintenance. [District Rule 2201 and District Rule 4401] Federally Enforceable Through Title V Permit

17. The District shall be notified at least 48 hours prior to the start of each maintenance program. No later than 10 days after completing each maintenance episode, the permittee shall notify the District in writing of the date, time, duration, well number(s), and description of the maintenance or repair activity completed. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Permittee shall maintain records of the date, time, and duration of each maintenance or repair episode requiring the temporary isolation of well vent vapor recovery piping. Such records shall include well identification numbers and a description of the maintenance or repair activity completed, and shall be maintained for a period of up to 5 years, and be made readily available to the District upon request. Federally Enforceable Through Title V Permit

19. Permittee shall submit to the District bi-annual maintenance plans. The maintenance plan must identify each permit unit and illustrate them on a detailed map of the system, identify the period and duration of each maintenance episode for each system, an estimate of VOC emissions released during maintenance, and the procedures that will be used to maintain and isolate affected equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Non-condensible gas shall be scrubbed by sulfur scrubbing systems prior to incineration in steam generators S-1547-766 to '-772, '-777 to'-781, or other District approved steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Liquid condensate from vapor recovery piping, condensation, and sulfur scrubbing systems shall be pumped to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Non-condensible gas from vapor control system shall not be vented to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Maximum gas flow rate from well casing vent vapor control system shall not exceed 4.09 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Total mass flow rate of sulfur compounds from sulfur scrubbing systems shall not exceed 258.0 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Permittee shall maintain accurate daily records of gas flowrate leaving sulfur scrubbing systems, and sulfur content (by daily gas sampling) of non-condensible gas leaving sulfur scrubbing systems. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Particulate matter (as PM10) emissions from TEOR gas incineration shall not exceed 55.9 lb/day (shared with all District approved steam generators). [District Rule 2201] Federally Enforceable Through Title V Permit
27. Note: Formerly S-1511-213 [District Rule 2201] Federally Enforceable Through Title V Permit
28. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-820-5 **EXPIRATION DATE:** 05/31/2022

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
TEOR OPERATION WITH 324 WELLS SERVED BY VAPOR CONTROL SYSTEM WITH LIQUID KNOCK-OUT VESSELS, HEAT EXCHANGERS, & COMPRESSORS, WITH VAPOR PIPING TO APPROVED INJECTION WELLS (MIDWAY SUNSET FIELD)

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall include knockout vessels, heat exchangers, and vapor compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All noncondensible vapors from vapor compressor(s) shall be piped to gas injection wells only. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall reinject vapors into Department of Oil, Gas, and Geothermal Resources (DOGGR) approved gas injection wells only. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Water and VOC condensate from all liquid knockout drums shall be pumped to production system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 28.1 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Note: Formerly S-1511-219 [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-821-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
TEOR OPERATION WITH 215 WELLS SERVED BY VAPOR CONTROL SYSTEM WITH VAPOR CONTROL PIPING TO APPROVED INJECTION WELLS (MIDWAY SUNSET FIELD)

PERMIT UNIT REQUIREMENTS

1. Vapor control system shall include liquid knockout vessels, heat exchangers, and vapor compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All noncondensible vapors from vapor compressor(s) shall be piped to gas injection wells only. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall reinject vapors into Department of Oil, Gas, and Geothermal Resources (DOGGR) approved gas injection wells only. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Water and VOC condensate from all liquid knockout drums shall be pumped to production system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 3.14 lb/(well x day). [District Rule 2201] Federally Enforceable Through Title V Permit
6. Note: Formerly S-1511-222 [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-823-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW25 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY SYSTEM SERVING 40 STEAM DRIVE WELLS, INCLUDING: LIQUID KNOCKOUT VESSELS, HEAT EXCHANGERS, AND COMPRESSORS. - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Water/VOC condensate from all liquid knockout drums shall be pumped to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from the TEOR operation shall not exceed the following limit: VOC - 5.23 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Formerly S-1511-228.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-825-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH A COEN ULN LOW NOX BURNER, FLUE GAS RECIRCULATION WITH PLC CONTROL, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE VAPOR PIPING FROM VAPOR CONTROL SYSTEM S-1547-714 (401L) (LOST HILLS 2 LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
7. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, , VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District NSR Rule and District Rules 2520, 9.1, 42] Federally Enforceable Through Title V Permit
13. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Compliance demonstration (source testing) shall be by District witnessed, or authorized. Sample collection shall be by an ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
17. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx and CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306,] Federally Enforceable Through Title V Permit
18. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306,] Federally Enforceable Through Title V Permit
19. All units in a group for which representative units are source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306,] Federally Enforceable Through Title V Permit
20. All units in a group for which representative units are source tested for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches at any time to an alternate fuel type then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306,] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of annual sulfur analyses of and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, District Rule 1070 and 2520, 9.] Federally Enforceable Through Title V Permit
22. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
23. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1070, District NSR Rule] Federally Enforceable Through Title V Permit
24. Formerly S-1511-235 [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-826-15 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN-ULN BURNER AND FLUE GAS RECIRCULATION (FINLEY #8, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9461 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
9. Formerly S-1511-238 [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-827-19 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM [FINLEY #11, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.008 lb/MMBtu or 0.303 lb/hr (PSD hourly limit), SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1, PSD] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. Formerly S-1511-239 [District Rule 2201] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-828-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FINLEY #12, NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.008 lb/MMBtu or 0.303 lb/hr (PSD hourly limit), SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1, PSD] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. Formerly S-1511-240 [District Rule 2201] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-829-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (FGR) (FINLEY #13) (NORTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.008 lb/MMBtu or 0.303 lb/hr (PSD hourly limit), SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1, PSD] Federally Enforceable Through Title V Permit
5. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
7. Formerly S-1511-241 [District Rule 2201] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-02] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the Alberta Shale TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-02] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-830-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NW19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR, WITH A COEN ULN BURNER, A FLUE GAS RECIRCULATION (FGR) SYSTEM, OXYGEN MONITOR/CONTROLLER, AND NON-CONDENSIBLE VAPOR PIPING FROM VAPOR CONTROL SYSTEM S-1547-714, (401K) (LOST HILLS 2 LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
2. When this unit is dormant, the fuel supply line shall be physically disconnected. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. FGR shall be operated in the open position at all times unless source testing pursuant to District Rule 1081 demonstrates compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Unit shall be equipped with natural gas and TEOR non-condensible gas volume flow meters and flue gas oxygen monitor/controller. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-714 and/or S-1547-1211 shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum vapor recovery gas flow rate for this unit shall not exceed 610.8 Mcf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Total mass flow rate of sulfur compounds from all fuel sources entering District approved steam generators connected to sulfur scrubbing systems of S-1547-714 and/or S-1547-1211 shall not exceed 103.4 lb/day as S. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
12. Fuel sulfur content of all gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. When natural gas and TEOR gas fired, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.2 lb/day)+(17.1 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District NSR Rule] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 6023 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall perform District-witnessed, or approved fuel gas sulfur analysis of non-TEOR gas combusted in the unit on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
18. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. A separate H2S test is not required if results of Total Sulfur test demonstrates compliance with applicable H2S limits. [District Rule 4320] Federally Enforceable Through Title V Permit
19. Permittee shall maintain accurate records of annual sulfur analyses of and daily consumption of natural gas/TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and NSR] Federally Enforceable Through Title V Permit
20. Permittee shall perform daily sulfur mass balance calculations from records required on vapor control system S-1547-714 and sulfur scrubber '-1211, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
21. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rule 4320] Federally Enforceable Through Title V Permit
22. Formerly S-1511-244 [District Rule 2201] Federally Enforceable Through Title V Permit
23. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-831-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW-NOX BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM, (MAXWELL #6) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
6. This unit is approved to operate at the following locations: SE35/T12N/R24W and NE27/T31S/R22E. [District Rule 4102] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Steam generator shall be equipped with operational vapor recovery gas volumetric flow meter whenever unit is connected to the vapor recovery gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Unit may be disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter removed (or replaced). Permittee shall keep a written record of the date(s) when the unit is disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter is removed (or replaced). [District Rule 1080] Federally Enforceable Through Title V Permit
11. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
14. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
15. Formerly S-1511-246 [District Rule 2201] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-832-22 **EXPIRATION DATE:** 05/31/2022

SECTION: NE03 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C. E. NATCO GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION, AND OXYGEN ANALYZER/CONTROLLER. (#3-2C, BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with an operational fuel gas volumetric flow meter and flue gas oxygen monitor/controller. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
8. When TEOR gas is connected to this unit, steam generator shall be equipped with an operational volumetric TEOR gas flow meter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. Permittee shall notify the District, in writing, at least 15 days prior to burning TEOR gas and when discontinuing the burning of TEOR gas. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Steam generator shall be equipped with a programmable logic controller (PLC). [District Rule 4305] Federally Enforceable Through Title V Permit
11. Only natural gas or a combination of natural gas and scrubbed non-condensible vapors shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas combusted in this steam generator shall not exceed 1,440 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
14. Emission rates shall not exceed either of the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4320, 4406,] Federally Enforceable Through Title V Permit
15. Emission rates, except during startup, shutdown, and refractory curing shall not exceed the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: PM10: 7.2 lb/day, SOx (as SO2): 2.9 lb/day, VOC: 4.3 lb/day, NOx (as NO2): 49.0 lb/day or 9461 lb/year, or CO: 43.2 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 4320] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas and TEOR waste gas, and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. Formerly S-1511-247 [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-833-22 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C. E. NATCO GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LO-NOX BURNER ASSEMBLY, FLUE GAS RECIRCULATION, AND OXYGEN ANALYZER/CONTROLLER (#2-5F) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is implemented that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
7. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational fuel gas and vapor recovery gas volumetric flow meters . [District NSR Rule] Federally Enforceable Through Title V Permit
9. Annual heat input to steam generator shall not exceed 525.6 billion Btu hhv. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM-10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District NSR Rule, 2520, 4201, 4301, 4305, 4306, 4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 51.0 lb/day or 9461 lb/year, or CO: 45.0 lb/day [District NSR Rule] Federally Enforceable Through Title V Permit
13. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Formerly S-1511-248 [District Rule 2201]
16. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-834-19 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR, WITH A COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3I) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain records of higher heating value and daily quantity of natural gas and vapor recovery gas burned in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emission rates shall not exceed the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit

13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 51.8 lb/day or 5889 lb/year, or CO: 44.0 lb/day. [District Rules 2201 and 4301, 5.2.1 and 5.2.3] Federally Enforceable Through Title V Permit

16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Formerly S-1511-249 [District Rule 2201] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-835-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SE02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH COEN QLN-ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359, (#2-3J) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Unit shall be equipped with natural gas and vapor recovery gas volume flowmeters. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum vapor recovery gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain records of higher heating value and daily quantity of natural gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The total fuel burned in this unit shall be less than 50% by volume PUC quality natural gas determined on a calendar month basis. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
9. Fuel H2S, total sulfur, and methane content shall be determined semi-annually. [District Rule 4320] Federally Enforceable Through Title V Permit
10. The PUC quality/produced natural gas line and CVR/waste gas line shall each be equipped with a volumetric fuel meter. Permittee shall maintain monthly records of the percentage by volume of PUC quality natural gas burned in the unit. Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur content of all fuel gas sources combined shall not exceed 5 gr-S/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emission rates shall not exceed the following: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District Rule 4320] Federally Enforceable Through Title V Permit
13. When natural gas and vapor recovery gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total vapor recovery gas gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201, 4301, 4406, and 4] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: PM10: 240.0 lb/day, VOC: 4.4 lb/day, NOx (as NO2): 49.9 lb/day or 5889 lb/year, or CO: 44.0 lb/day. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit
16. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of vapor recovery gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Formerly S-1511-250 [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-836-23 **EXPIRATION DATE:** 05/31/2022

SECTION: SW01 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN 3.2 LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION (FGR) AND NON-CONDENSABLE PIPING FROM VAPOR CONTROL SYSTEM, (#1-1E) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational fuel gas volumetric flow meter . [District NSR Rule] Federally Enforceable Through Title V Permit
5. When TEOR gas is connected to this unit, steam generator shall be equipped with an operational volumetric TEOR gas flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Permittee shall notify the District, in writing, at least 15 days prior to burning TEOR gas and when discontinuing the burning of TEOR gas. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
10. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit
11. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District NSR Rule, Rules 2520, 4301, 4406, and 480] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit
13. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40.0 ppmv @ 3% O2. [District NSR Rule and Rules 2520, 4301, 4305, 4306] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 4380 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2; 4306, 6.3.2 and 4351, 6] Federally Enforceable Through Title V Permit
17. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
18. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
19. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
20. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit
21. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sample collection for compliance demonstration (source testing) shall be by an ARB certified testing laboratory and shall be District witnessed or authorized. [District Rule 1081] Federally Enforceable Through Title V Permit
24. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas. [District NSR Rule, District Rules 1070 and 2520, 9] Federally Enforceable Through Title V Permit
25. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Formerly S-1511-253 [District Rule 2201] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-837-27 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN ULN LOW NOX BURNER, FLUE GAS RECIRCULATION, AND NON-CONDENSIBLE PIPING FROM VAPOR CONTROL SYSTEM S-1547-359. (#11-1F) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2.1 and Rule 4] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational fuel gas volumetric flow meter . [District NSR Rule] Federally Enforceable Through Title V Permit
4. Steam generator shall be equipped with operational vapor control system gas supply volumetric flow meter whenever unit is connected to the vapor control system gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum TEOR gas flow rate for this unit shall not exceed 1,300 Mcf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
7. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
10. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods specified in this permit. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit
11. When fired exclusively on natural gas, except during startup, shutdown, and refractory curing, emissions from this unit shall not exceed either of the following limits: PM10: 0.005 lb/MMBtu or SOx (as SO2): 0.002 lb/MMBtu. [District NSR Rule, Rules 2520, 4301, 4406, and 480] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. When natural gas and TEOR gas fired, except during startup, shutdown, and refractory curing, maximum PM10 emissions shall not exceed the lb/hr limit calculated as follows: PM10 = {(7.0 lb/day)+(249.2 lb/day)x(fraction of total TEOR gas incinerated in this unit during testing)}/(24 hr/day). [District Rules 2201, 2520, 4201 and 4301] Federally Enforceable Through Title V Permit

13. Steam generator shall be operated at no greater than 1,466.7 MMBtu hhv/day heat input. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40.0 ppmv @ 3% O2. [District NSR Rule and Rules 2520, 4301, 4305, 4306] Federally Enforceable Through Title V Permit

15. Natural gas fuel sulfur content shall not exceed 5.0 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day or 5889 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rule 4305, 6.3.2; 4306, 6.3.2 and 4351, 6] Federally Enforceable Through Title V Permit

18. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit

19. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit

20. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 4305, 6.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit

21. Only natural gas or a combination of natural gas and scrubbed non-condensible gas from sulfur scrubbing system(s) S-1547-359 shall be used as fuel in this steam generator. [District NSR Rule] Federally Enforceable Through Title V Permit

22. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. Sample collection for compliance demonstration (source testing) shall be by an ARB certified testing laboratory and shall be District witnessed or authorized. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Permittee shall maintain accurate records of heating values (in Btu/scf) and daily consumption of natural gas/TEOR waste gas. [District NSR Rule, District Rules 1070 and 2520, 9] Federally Enforceable Through Title V Permit
26. NOTE: There are no sulfur compounds daily emission limits (DELs) expressed on this permit for incineration of TEOR gas, sulfur compounds emissions are limited by DELs on permit S-1547-359. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Formerly S-1511-253 [District Rule 2201] Federally Enforceable Through Title V Permit
28. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-838-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
40 UNCONTROLLED CYCLICALLY STEAMED ENHANCED CRUDE OIL PILOT TESTING WELLS. - VARIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Any changes to the number of uncontrolled cyclically steamed oil production wells in the Western Heavy Oil Stationary Source shall require an Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain current roster of all open vent cyclically steamed wells that have been steamed within the previous 5 years being operated under this permit & such roster shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well roster shall include identification of all uncontrolled cyclic wells undergoing pilot testing. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Total number of uncontrolled cyclic wells undergoing pilot testing (exempt from control requirements pursuant to Rule 4401 section 4.2) shall not exceed 40. [District Rule 4401, 4.3] Federally Enforceable Through Title V Permit
5. Cyclic wells undergoing pilot testing, or exempt pursuant to Rule 4401 section 4.2, shall be located more than 1,000 feet from any existing well vent vapor recovery system operated by permittee. [District Rule 4401, 4.2.2] Federally Enforceable Through Title V Permit
6. Wells undergoing pilot testing shall not produce from a zone on that property that has been injected with steam during the preceding two years. [District Rule 4401, 4.2.1] Federally Enforceable Through Title V Permit
7. Pilot testing of wells for the purpose of determining the viability of developing a steam-enhanced production zone shall not exceed 180 days for each production zone. [District Rule 4401, 3.25] Federally Enforceable Through Title V Permit
8. Note: Formerly S-1511-258

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-842-3 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
ONE 55,464 GALLON OILFIELD PRODUCTION SAND BASIN. - BELRIDGE

PERMIT UNIT REQUIREMENTS

1. This sand basin shall not operate as a sump as defined in District Rule 4402. [District Rule 4402, 2.0] Federally Enforceable Through Title V Permit
2. Note: Formerly S-1511-273

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-843-12 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
3,000 BBL (126,000 GALLON) PRODUCED WATER FIXED ROOF STORAGE TANK (#F501A) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025), INCLUDING LIQUID KNOCKOUT VESSELS, COMPRESSORS AND COOLERS, AND PIPING TO SULFUR SCRUBBER S-1547-819

PERMIT UNIT REQUIREMENTS

1. Water/VOC condensate from all liquid knockout vessels shall be piped to the production manifold or to an organic liquid storage tank that is served by the vapor recovery system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank and the vapor recovery system shall not exceed 1.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. H2S concentration in tank vapor space shall not exceed 20,000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Compliance source testing for H2S concentration of tank vapor space shall be conducted annually (or as approved by the District). Records of H2S concentration shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
6. Permittee shall maintain monthly records of true vapor pressure (TVP) of liquids stored and H2S concentration of tank vapor space. [District Rule 2201 and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
7. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Note: Formerly S-1511-282. [District Rule 2201] Federally Enforceable Through Title V Permit
9. MOCO CLEANING CONDITION: During tank cleaning and maintenance, only one tank shall be vented to the atmosphere at any given time. [District Rule 2201] Federally Enforceable Through Title V Permit
10. MOCO INSPECTION CONDITION: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. MOCO INSPECTION CONDITION: A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit

12. MOCO INSPECTION CONDITION: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. MOCO INSPECTION CONDITION: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. MOCO INSPECTION CONDITION: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99% efficient as measured by EPA Method 18 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. MOCO INSPECTION CONDITION: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. MOCO INSPECTION CONDITION: If the leaking component is an essential part of a critical process unit which cannot be immediately shutdown for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shutdown. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. MOCO INSPECTION CONDITION: Operator shall determine the presence of VOC leaks by EPA Method 21. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. MOCO INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. MOCO TESTING CONDITION: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. MOCO TESTING CONDITION: For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
21. MOCO TESTING CONDITION: H2S concentration in tank vapor space shall be determined by: GC/FPD or ASTM D-3246. [District Rule 1081] Federally Enforceable Through Title V Permit
22. MOCO TESTING CONDITION: Operator shall maintain the records of TVP testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit
23. MOCO TESTING CONDITION: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
24. MOCO VAPOR RECOVERY CONDITION: All piping, fittings, and valves shall be constructed and maintained in a gas tight condition. [District Rule 2201] Federally Enforceable Through Title V Permit
25. MOCO VAPOR RECOVERY CONDITION: Except during periods of authorized cleaning and maintenance allowed by this permit, tank shall be connected to a vapor recovery system that is functioning as necessary to maintain the vapor recovery pressure below the tank pressure relief valve settings. The operator shall monitor vapor recovery compressor activation pressures on a quarterly basis to ensure that compressor activation pressure does not exceed tank pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. MOCO VAPOR RECOVERY CONDITION: Except during periods of maintenance, involuntary power curtailments and the voluntary power demand reduction program, the storage tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in a leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99%, by weight, as determined by the test method specified in Section 6.4.7 of District Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
27. MOCO VAPOR RECOVERY CONDITION: Permittee shall maintain accurate records of the amount of time the vapor collection system is shutdown for maintenance, involuntary power curtailments and the voluntary power demand reduction program and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. MOCO VAPOR RECOVERY CONDITION: Tank gauging, thief hatches and/or sampling devices shall be equipped with gas tight covers which shall remain closed at all times except during gauging and sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
29. MOCO VAPOR RECOVERY CONDITION: Tank pressure relief valve(s) shall be closed and leak-free during normal operation. Tank pressure relief valve(s) may open when the vapor collection system is shutdown for maintenance, involuntary power disruptions or your power demand reduction program. [District Rule 2201] Federally Enforceable Through Title V Permit
30. MOCO VAPOR RECOVERY CONDITION: The tank pressure relief valve(s) shall be set to within 10% of the maximum allowable working pressure of the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
31. MOCO VAPOR RECOVERY CONDITION: The vapor collection system can be shutdown as a part of the voluntary power demand reduction program for no more than 5 hours per day, 5 days per year between the dates of May 1 and October 31. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. MOCO VAPOR RECOVERY CONDITION: The vapor collection system can be shutdown for maintenance or involuntary power curtailments for a combined total of no more than 24 hours per calendar quarter. Involuntary power curtailments shall be defined as power disruptions that are caused solely by the power distributor and shall also include any time necessary to switch back and forth between power providers. [District Rule 2201] Federally Enforceable Through Title V Permit

33. MOCO VAPOR RECOVERY CONDITION: The vapor control system shall operate with a minimum control efficiency of 90% when the vapor collection system is shutdown down for maintenance, involuntary power curtailments or the voluntary power demand reduction program. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-844-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GALLON 40' DIA. FIXED ROOF RECLAIM OIL TANK (F401A) VENTED TO VAPOR CONTROL LISTED ON S-1547-843. - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-283. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-845-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GALLON 30' DIA. FIXED ROOF PRODUCED WATER TANK (#F501B) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-284. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-846-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GAL 30' DIA. FIXED ROOF PRODUCED WATER TANK (#F201A) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-285. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-847-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GAL 30' DIA. FIXED ROOF PRODUCED WATER TANK (#F201B) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-286. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-848-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GALLON 40' DIA. FIXED ROOF RECLAIM OIL TANK (#F401B) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-287. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-849-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GALLON 30' DIA. FIXED ROOF REJECT OIL TANK (F301A) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-288. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-850-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
126,000 GALLON 30' DIA. FIXED ROOF REJECT OIL TANK (#F301B) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-289. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-851-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
210,000 GALLON, 40' DIA. FIXED ROOF LACT OIL TANK (F101A) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-290. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-852-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
210,000 GALLON, 40' DIA. FIXED ROOF LACT OIL TANK (#F101B) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-291. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-853-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
210,000 GALLON, 40' DIA. FIXED ROOF LACT OIL TANK (#F101C) SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-292. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-854-14 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
126,000 GALLON (3,000 BBL) FIXED ROOF REJECT OIL TANK WITH VAPOR CONTROL SYSTEM SHARED WITH S-1547-854 TO `-863, `-990, '-991, `-992, '-1152, '-1159, AND '-1160 INCLUDING VAPOR COMPRESSORS, COMPRESSOR RECYCLE COOLER, LIQUID KNOCKOUT VESSELS (INCLUDING FWKO #D-101A), AND PIPING TO SULFUR REMOVAL SYSTEM S-1547-714 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Vapor control system compressor shall activate before the tank internal pressure exceeds relief valve settings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Vapor control system shall vent only to sulfur removal system S-1547-714 during normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
4. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 71.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Note: Formerly S-1511-322. [District Rule 2201] Federally Enforceable Through Title V Permit
7. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: Tank, vessel,or unit shall be designed and maintained to vent only to vapor control system listed on PTO S-1547-854, except during periods of Tank, vessel,or unit cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
8. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: The vapor control system shall be operated at all times except during power outages and approved maintenance activities not to exceed 240 cumulative hours per calendar year. Approved maintenance activities include vapor control system maintenance and cleaning and/or maintenance of the clarifier tank at the Lost Hills 2 Water Plant. [District Rule 2201] Federally Enforceable Through Title V Permit
9. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: During periods of vapor control system maintenance activities and power outages, vapor control system shall operate as a vapor balance system with operational pressure/vacuum relief valves preventing loss to the atmosphere except for fugitive leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
10. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: Any tank gauging or sampling device or other roof appurtenance on a tank vented to the vapor recovery system shall be equipped with a cover, which shall be closed at all times except during gauging, sampling, tank or knockout vessel cleaning or when repairing or performing maintenance on a sampling or gauging device or other roof appurtenance. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: Permittee shall maintain accurate records of vapor control system maintenance, power outages and records of hours of tank and knockout vessel cleaning. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. LOST HILLS 2 DEHY VAPOR RECOVERY CONDITION: The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
13. LOST HILLS 2 DEHY INSPECTION CONDITION: A leak is defined as an emissions rate exceeding 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
14. LOST HILLS 2 DEHY INSPECTION CONDITION: All piping, fittings, valves, gauging and sampling devices and roof appurtenances comprising the vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. LOST HILLS 2 DEHY INSPECTION CONDITION: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. LOST HILLS 2 DEHY INSPECTION CONDITION: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. LOST HILLS 2 DEHY INSPECTION CONDITION: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. LOST HILLS 2 DEHY INSPECTION CONDITION: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. LOST HILLS 2 DEHY INSPECTION CONDITION: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. LOST HILLS 2 DEHY INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. LOST HILLS 2 DEHY TESTING CONDITION: True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. LOST HILLS 2 DEHY TESTING CONDITION: Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

23. LOST HILLS 2 DEHY CLEANING CONDITION: Tank, vessel,or unit cleaning shall not exceed 96 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-855-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
126,000 GALLON (3000 BBL) 30' DIA. FIXED ROOF RECLAIM OIL TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 4.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-323. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-856-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
126,000 GALLON (3000 BBL) 30' DIA. FIXED ROOF LACT TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 4.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-324. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-857-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
126,000 GALLON (3000 BBL) 30' DIA. FIXED ROOF LACT TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 4.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-325. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-858-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
63,000 GALLON (1500 BBL) 22' DIA. CONE BOTTOM CONSTANT LEVEL CLARIFIER TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 5.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-326. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-859-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
63,000 GALLON (1500 BBL) 22' DIA. FLAT BOTTOM CLARIFIER TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 5.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-327. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-860-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
4,200 GALLON (100 BBL) 10' DIA. CONSTANT LEVEL PIT TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.2 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 2.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-328. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-861-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
4,200 GALLON (100 BBL) 10' DIA. PIT TANK VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
2. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 2.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-329. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-862-6 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
65 HP WEMCO INDUCED GAS FLOATATION UNIT (OIL/WATER SEPARATOR) VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 5.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-330. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-863-6 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
65 HP WEMCO INDUCED GAS FLOATATION UNIT (OIL/WATER SEPARATOR) VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-854 (LOST HILLS)

PERMIT UNIT REQUIREMENTS

1. Total VOC emissions rate from vapor control system components associated with this emission unit shall not exceed 5.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-331. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Lost Hills 2 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-864-5 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
86,026 GALLONS (46 FT X 50 FT X 10 FT MAXIMUM DEPTH) SAND BASIN (SB-101) - LOST HILLS

PERMIT UNIT REQUIREMENTS

1. Sand basin shall receive liquids and solids only from AERA's Heavy Oil Western Stationary Source. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During the clean out operation, the solids and liquids shall be removed from the sand basin in a timely manner to minimize VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed the following 13.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sand basin surface area shall not exceed 2,300 sq.ft. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This sand basin shall not operate as a sump as defined in District Rule 4402. [District Rule 4402, 2.0] Federally Enforceable Through Title V Permit
7. Note: Formerly S-1511-332

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-865-11 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10 FT X 50 FT (700 BBL) FWKO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Vapor control system listed on this permit shall be connected to the following units: S-1135-336, S-1547-865 through '-877, '-994, '-995, '-998 through '-1001, and '-1016 through '-1018. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Vapor control system shall include compressors, recycle coolers, knockout vessels, and piping to DOGGR approved disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Uncondensed vapors from vapor compressor(s) shall only be piped to DOGGR approved gas disposal wells. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain a current listing of all DOGGR approved gas disposal wells connected to this vapor control system, and such listing shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 26.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. AFS VAPOR RECOVERY CONDITION: Vapor control efficiency shall be maintained at no less than 99% during normal operation. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. AFS VAPOR RECOVERY CONDITION: During periods of voluntary demand reduction power outages, vapor control system shall operate through the use of an operational pressure/vacuum vent and a vapor balanced system. [District Rule 2201] Federally Enforceable Through Title V Permit

13. AFS VAPOR RECOVERY CONDITION: Water and volatile organic compound (VOC) condensate from all liquid knockout drums shall be pumped to production system. [District Rule 2201] Federally Enforceable Through Title V Permit

14. AFS VAPOR RECOVERY CONDITION: Except during authorized tank cleaning operations, the operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the tank pressure relief valve settings. The operator shall verify vapor recovery compressor activation pressure on quarterly basis to ensure that compressor activation pressure does not exceed tank pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. AFS VAPOR RECOVERY CONDITION: Vapor control system pressure transmitters shall be inspected and maintained in good operating conditions. The inspections shall be conducted on a quarterly basis. Replacing and repairing of each pressure transmitters shall not exceed one hour per day. [District Rule 2201] Federally Enforceable Through Title V Permit

16. AFS VAPOR RECOVERY CONDITION: Tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit

17. AFS VAPOR RECOVERY CONDITION: All gauge hatches, sampling ports, pressure relief valves, vapor control system components, etc., shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit

18. AFS VAPOR RECOVERY CONDITION: All seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit

19. AFS VAPOR RECOVERY CONDITION: Tank pressure/vacuum valve shall be inspected on an annual basis. During the pv valve inspections, the pv valve can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of pv valve. [District Rule 2080] Federally Enforceable Through Title V Permit

20. AFS VAPOR RECOVERY CONDITION: Permittee shall maintain records of vapor control skid maintenance and voluntary power demand reduction situations, and such records shall be made available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. AFS INSPECTION CONDITION: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. AFS INSPECTION CONDITION: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

23. AFS INSPECTION CONDITION: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. AFS INSPECTION CONDITION: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. AFS INSPECTION CONDITION: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

26. AFS INSPECTION CONDITION: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

27. AFS INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. AFS CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

29. AFS CLEANING CONDITION: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

30. AFS CLEANING CONDITION: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

31. AFS CLEANING CONDITION: Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least 2 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) Vent the tank to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

32. AFS CLEANING CONDITION: The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

33. AFS CLEANING CONDITION: Steam cleaning shall be allowed only during December through March unless at a location where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. AFS CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

35. AFS TESTING CONDITION: Permittee shall maintain accurate records of the TVP of liquids stored and such records shall be made readily available for District inspection at any time for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

36. AFS TESTING CONDITION: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

37. AFS TESTING CONDITION: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

38. AFS TESTING CONDITION: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-866-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF, CONE BOTTOM CLARIFIER TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-867-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF, REJECT OIL TANK (F-103) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-868-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF REJECT OIL TANK (F203) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-869-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5000 BBL (210,000 GALLON) FIXED ROOF LACT TANK (F-105) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-870-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF LACT TANK (F205) SERVED BY VAPOR CONTROL SYSTEM S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-871-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED ROOF RECLAIM OIL TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-872-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED ROOF RECLAIM OIL TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-873-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF RECLAIM OIL TANK (F204) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 4.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-874-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10,500 GALLON FIXED ROOF PIT TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-875-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10,500 GALLON FIXED ROOF PIT TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-876-5 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
INDUCED GAS FLOATATION UNIT WITH VAPOR CONTROL - NORTH MIDWAY (REISSUED 11/16/05)

PERMIT UNIT REQUIREMENTS

1. Flotation unit shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Flotation unit shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from this vessel shall not exceed 3.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in vessel vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this vessel and the associated tank vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Tank Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-877-5 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
INDUCED GAS FLOATATION UNIT WITH VAPOR CONTROL - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Flotation unit shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Flotation unit shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from this vessel shall not exceed 4.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in vessel vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this vessel and the associated tank vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-879-10 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
SOLAR CENTAUR MODEL T4500, 3.2 MW, 61.5 MMBTU/HR HEAT INPUT, GAS-FIRED GAS TURBINE ENGINE/GENERATOR WITH INLET AIR EVAPORATIVE COOLER AND H2O INJECTION, 38.7 MMBTU/HR DUCT BURNER, AND S.C.R. WITH AMMONIA INJECTION. - BELRIDGE

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in the following conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4703 Tier 3. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rules 1070 and 2080] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 2080] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201 and 4703, 6.3] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with NOx and CO emission limits and a fuel sulfur content certification shall be performed within 60 days of recommencing operation of this unit. [District Rules 2201 and 4703, 6.3] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4703, 6.2] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, gas turbine engine shall be equipped with continuously recording fuel-to-water injection ratio monitor accurate to within +/- 5%. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall exhaust only to heat recovery steam generator and duct burner shall receive combustion air only from gas turbine exhaust. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, duct burner fuel gas supply shall be equipped with injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Upon recommencing operation, ammonia injection grid shall be equipped with operational ammonia flow meter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Upon recommencing operation, gas temperature at SCR catalyst section inlet shall be monitored by operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates at duct burner exhaust shall not exceed any of the following: 23.0 lb/day PM10, 4.7 lb/day SOx (as SO2), 64.8 lb/day NOx (as NO2), 26.4 lb/day VOC, or 168.7 lb/day CO. [District Rule 2201] Federally Enforceable Through Title V Permit
16. No more than 1.4 MM scf/day of natural gas shall be consumed by gas turbine and no more than 0.9 MM scf/day of natural gas shall be consumed by duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and 2 hours for shutdown, per occurrence. [District Rule 4001, District Rule 2201] Federally Enforceable Through Title V Permit
18. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. [District Rules 1070 and 2520, 9.4] Federally Enforceable Through Title V Permit
19. Upon recommencing operation, to demonstrate compliance with NO2 and CO emissions during days of startup/shutdown, daily emissions shall be calculated by a continuous emissions monitoring (CEM) system. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Daily records of NO2 and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
21. Emissions from this unit shall not exceed any of the following (based on three-hour rolling average): NOx (as NO2): 5 ppmv dry @ 15% O2 (equates to 27.2 lb/day) and CO: 200 ppmv dry @ 15% O2 (equates to 661.8 lb/day). [District Rule 4703, 5.1 and 5.2] Federally Enforceable Through Title V Permit
22. Except during periods of startup/shutdown, gas turbine engine emission rates shall not exceed any of the following: NOx as NO2: 2.70 lb/hr, or CO: 7.03 lb/hr, PM10: 0.96 lb/hr, SOx as SO2: 0.20 lb/hr, or VOC: 1.10 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Maximum NOx emission rate (one hour average) shall not exceed the NSPS standard of 150 ppmvd @ 15% O2 and SOX emissions shall not exceed 150 ppmvd @ 15% O2. [District Rule 4001] Federally Enforceable Through Title V Permit
24. Compliance with hourly NOx (2.70 lb/hr) and CO (7.03 lb/hr) emission limits shall be demonstrated annually by District-witnessed sample collection done by independent testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Compliance with sulfur oxide emission limits shall be demonstrated by fuel gas sulfur analysis by independent testing laboratory annually. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
28. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit

32. Permittee shall comply in full with Rule 4001 (New Source Performance Standards) requirements, including notification, recordkeeping and monitoring. [District Rule 4001] Federally Enforceable Through Title V Permit

33. Upon recommencing operation, permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rules 1070 and 2520, 9.4] Federally Enforceable Through Title V Permit

34. Upon recommencing operation, permittee shall maintain accurate records of ammonia consumption. [District Rules 1070 and 2520, 9.4] Federally Enforceable Through Title V Permit

35. Permittee shall report the following emission exceedances to the District: emission rates of NOx & CO on a three-hour rolling average, NSPS emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not recognized as a basis for a Rule 1100 enforcement exemption. [District Rule 2201] Federally Enforceable Through Title V Permit

37. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

38. The owner or operator of any existing stationary gas turbine system (unless exempted because all turbines are under ownership or control and have NOx and CO emissions limits which are shown on the current Permit to Operate and which do not exceed the applicable Compliance Limits in Section 5.0) shall submit to the APCO for approval, an emissions control plan of all actions. The control plan shall include a schedule of increments of progress that will be taken to comply with the requirements of the applicable NOx Compliance Limit in Section 5.0 and Compliance Schedule in Section 7.0 of District Rule 4703 (as amended 4/25/02). [District Rule 4703, 6.1.5] Federally Enforceable Through Title V Permit

39. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520 and 4703, 6.2.6] Federally Enforceable Through Title V Permit

40. Unit shall demonstrate compliance annually with NOx and CO emissions limits with the auxiliary burner in operation and not in operation. An annual demonstration of compliance with the auxiliary burner in operation is not required in any year in which the auxiliary burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the auxiliary burner. An annual demonstration of compliance with the auxiliary burner not in operation is not required in any year in which the auxiliary burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the auxiliary burner. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit

41. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

42. Upon recommencing operation, the permittee shall operate and maintain a continuous monitoring and recording system to measure oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. Upon recommencing operation, the continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5] Federally Enforceable Through Title V Permit

44. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, records of continuous emissions monitoring system shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of CEMs, and emission measurements. [District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

46. When designated as a dormant emissions unit, the permittee shall not be required to perform monitoring requirements or submit CEMs reports for any calendar quarter in which the unit is not operational. Permittee shall submit a CEMs written report to the District for each calendar quarter in which the unit operated, due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rules 1080, 8.0, 2201, 2520, 9.6.1] Federally Enforceable Through Title V Permit

47. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

48. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEM. For planned CEM maintenance that will require the CEM system to be shut down more than 4 hours in a day or more than 12 hours in a calendar month, the operator shall notify the District at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

49. Upon recommencing operation, permittee shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 0.75 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 0.75 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

51. The following methods shall be used for testing required by this permit: NOx (ppmv) - EPA Method 7E,, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B, Stack gas oxygen - EPA Method 3 or 3A, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, Fuel gas sulfur content - ASTM D3246 or double GC for H2S and Mercaptans, Fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335(b) and District Rules 1081 and 4703, 6.4] Federally Enforceable Through Title V Permit

52. Note: Formerly S-1511-361

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-880-10 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
SOLAR CENTAUR MODEL T4500, 3.2 MW, 61.5 MMBTU/HR HEAT INPUT, GAS-FIRED GAS TURBINE (COGEN UNIT #B) ENGINE/GENERATOR WITH INLET AIR EVAPORATIVE COOLER AND H2O INJECTION, 38.7 MMBTU/HR DUCT BURNER, AND S.C.R. WITH AMMONIA INJECTION. - BELRIDGE

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in the following conditions. [District Rule 2201]
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4703 Tier 3. [District Rule 2201]
3. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 2080] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with NOx and CO emission limits and a fuel sulfur content certification shall be performed within 60 days of recommencing operation of this unit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, gas turbine engine shall be equipped with continuously recording fuel-to-water injection ratio monitor accurate to within +/- 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall exhaust only to heat recovery steam generator and duct burner shall receive combustion air only from gas turbine exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, duct burner fuel gas supply shall be equipped with injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Upon recommencing operation, ammonia injection grid shall be equipped with operational ammonia flow meter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Upon recommencing operation, gas temperature at SCR catalyst section inlet shall be monitored by operational temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emission rates at duct burner exhaust shall not exceed any of the following: 23.0 lb/day PM10, 4.7 lb/day SOx (as SO2), 64.8 lb/day NOx (as NO2), 26.4 lb/day VOC, or 168.7 lb/day CO. [District NSR Rule] Federally Enforceable Through Title V Permit
16. No more than 1.4 MM scf/day of natural gas shall be consumed by gas turbine and no more than 0.9 MM scf/day of natural gas shall be consumed by duct burners. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and 2 hours for shutdown, per occurrence. [District Rule 4001, District NSR Rule] Federally Enforceable Through Title V Permit
18. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. [District Rule 1070]
19. Upon recommencing operation,to demonstrate compliance with NO2 and CO emissions during days of startup/shutdown, daily emissions shall be calculated by a continuous emissions monitoring (CEM) system. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Daily records of NO2 and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1070, District NSR Rule] Federally Enforceable Through Title V Permit
21. Emissions from this unit shall not exceed any of the following (based on three-hour rolling average): NOx (as NO2): 5 ppmv dry @ 15% O2 (equates to 27.2 lb/day) and CO: 200 ppmv dry @ 15% O2 (equates to 661.8 lb/day). [District Rule 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
22. Except during periods of startup/shutdown, gas turbine engine emission rates shall not exceed any of the following: NOx as NO2: 2.70 lb/hr, CO: 7.03 lb/hr, PM10: 0.96 lb/hr, SOx as SO2: 0.20 lb/hr, or VOC: 1.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Maximum NOx emission rate (one hour average) shall not exceed the NSPS standard of 150 ppmvd @ 15% O2 and SOX emissions shall not exceed 150 ppmvd @ 15% O2. [District Rule 4001] Federally Enforceable Through Title V Permit
24. Compliance with hourly NOx (2.70 lb/hr) and CO (7.03 lb/hr) emission limits shall be demonstrated annually by District-witnessed sample collection done by independent testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Compliance with sulfur oxide emission limits shall be demonstrated by fuel gas sulfur analysis by independent testing laboratory annually. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
29. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit

32. Records required by this permit shall be retained on site for a period of at least two years and shall be made readily available for District inspection upon request. [District Rule 1070]

33. Permittee shall comply in full with Rule 4001 (New Source Performance Standards) requirements, including notification, recordkeeping and monitoring. [District Rule 4001] Federally Enforceable Through Title V Permit

34. Upon recommencing operation, permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rule 1070]

35. Permittee shall maintain accurate records of ammonia consumption. [District Rule 1070]

36. Permittee shall report the following emission exceedances to the District: emission rates of NOx & CO on a three-hour rolling average, NSPS emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit

37. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not recognized as a basis for a Rule 1100 enforcement exemption. [District NSR Rule] Federally Enforceable Through Title V Permit

38. The owner or operator of any existing stationary gas turbine system (unless exempted because all turbines are under ownership or control and have NOx and CO emissions limits which are shown on the current Permit to Operate and which do not exceed the applicable Compliance Limits in Section 5.0) shall submit to the APCO for approval, an emissions control plan of all actions. The control plan shall include a schedule of increments of progress that will be taken to comply with the requirements of the applicable NOx Compliance Limit in Section 5.0 and Compliance Schedule in Section 7.0 of District Rule 4703 (as amended 4/25/02). [District Rule 4703, 6.1.5] Federally Enforceable Through Title V Permit

39. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520 and 4703, 6.2.6] Federally Enforceable Through Title V Permit

40. Unit shall demonstrate compliance annually with NOx and CO emissions limits with the auxiliary burner in operation and not in operation. An annual demonstration of compliance with the auxiliary burner in operation is not required in any year in which the auxiliary burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the auxiliary burner. An annual demonstration of compliance with the auxiliary burner not in operation is not required in any year in which the auxiliary burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the auxiliary burner. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit

41. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

42. Upon recommencing operation, the permittee shall operate and maintain a continuous monitoring and recording system to measure oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit

43. Upon recommencing operation, the continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, records of continuous emissions monitoring system shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of CEMs, and emission measurements. [District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

46. When designated as a dormant emissions unit, the permittee shall not be required to perform monitoring requirements or submit CEMs reports for any calendar quarter in which the unit is not operational. Permittee shall submit a CEMs written report to the District for each calendar quarter in which the unit operated due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0 and District Rule 2520, 9.6.1] Federally Enforceable Through Title V Permit

47. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

48. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEM. For planned CEM maintenance that will require the CEM system to be shut down more than 4 hours in a day or more than 12 hours in a calendar month, the operator shall notify the District at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

49. Upon recommencing operation, permittee shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 0.75 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 0.75 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

51. The following methods shall be used for testing required by this permit: NOx (ppmv) - EPA Method 7E, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B, Stack gas oxygen - EPA Method 3 or 3A, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, Fuel gas sulfur content - ASTM D3246 or double GC for H2S and Mercaptans, Fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335(b) and District Rules 1081 and 4703] Federally Enforceable Through Title V Permit

52. Note: Formerly S-1511-362

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-881-10 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
SOLAR CENTAUR MODEL T4500, 3.2 MW, 61.5 MMBTU/HR HEAT INPUT, GAS-FIRED GAS TURBINE (COGEN UNIT #C) ENGINE/GENERATOR WITH INLET AIR EVAPORATIVE COOLER, H2O INJECTION, 38.7 MMBTU/HR DUCT BURNER, AND S.C.R. WITH AMMONIA INJECTION. - BELRIDGE

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in the following conditions. [District Rule 2201]
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4703 Tier 3. [District Rule 2201]
3. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 2080] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
6. A source test to demonstrate compliance with NOx and CO emission limits and a fuel sulfur content certification shall be performed within 60 days of recommencing operation of this unit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Upon recommencing operation, gas turbine engine shall be equipped with continuously recording fuel-to-water injection ratio monitor accurate to within +/- 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall exhaust only to heat recovery steam generator and duct burner shall receive combustion air only from gas turbine exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, duct burner fuel gas supply shall be equipped with injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Upon recommencing operation, ammonia injection grid shall be equipped with operational ammonia flow meter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Upon recommencing operation, gas temperature at SCR catalyst section inlet shall be monitored by operational temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emission rates at duct burner exhaust shall not exceed any of the following: 23.0 lb/day PM10, 4.7 lb/day SOx (as SO2), 64.8 lb/day NOx (as NO2), 26.4 lb/day VOC, or 168.7 lb/day CO. [District NSR Rule] Federally Enforceable Through Title V Permit
16. No more than 1.4 MM scf/day of natural gas shall be consumed by gas turbine and no more than 0.9 MM scf/day of natural gas shall be consumed by duct burners. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and 2 hours for shutdown, per occurrence. [District Rule 4001, District NSR Rule] Federally Enforceable Through Title V Permit
18. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. [District Rule 1070]
19. Upon recommencing operation, to demonstrate compliance with NO2 and CO emissions during days of startup/shutdown, daily emissions shall be calculated by a continuous emissions monitoring (CEM) system. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Daily records of NO2 and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1070, District NSR Rule] Federally Enforceable Through Title V Permit
21. Emissions from this unit shall not exceed any of the following (based on three-hour rolling average): NOx (as NO2): 5 ppmv dry @ 15% O2 (equates to 27.2 lb/day) and CO: 200 ppmv dry @ 15% O2 (equates to 661.8 lb/day). [District Rule 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
22. Except during periods of startup/shutdown, gas turbine engine emission rates shall not exceed any of the following: NOx as NO2: 2.70 lb/hr, CO: 7.03 lb/hr, PM10: 0.96 lb/hr, SOx as SO2: 0.20 lb/hr, or VOC: 1.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Maximum NOx emission rate (one hour average) shall not exceed the NSPS standard of 150 ppmvd @ 15% O2 and SOX emissions shall not exceed 150 ppmvd @ 15% O2. [District Rule 4001] Federally Enforceable Through Title V Permit
24. Compliance with hourly NOx (2.70 lb/hr) and CO (7.03 lb/hr) emission limits shall be demonstrated annually by District-witnessed sample collection done by independent testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Compliance with sulfur oxide emission limits shall be demonstrated by fuel gas sulfur analysis by independent testing laboratory annually. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
29. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit

32. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070]

33. Permittee shall comply in full with Rule 4001 (New Source Performance Standards) requirements, including notification, recordkeeping and monitoring. [District Rule 4001] Federally Enforceable Through Title V Permit

34. Upon recommencing operation, permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rule 1070]

35. Permittee shall maintain accurate records of ammonia consumption. [District Rule 1070]

36. Permittee shall report the following emission exceedances to the District: emission rates of NOx & CO on a three-hour rolling average, NSPS emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit

37. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not recognized as a basis for a Rule 1100 enforcement exemption. [District NSR Rule] Federally Enforceable Through Title V Permit

38. The owner or operator of any existing stationary gas turbine system (unless exempted because all turbines are under ownership or control and have NOx and CO emissions limits which are shown on the current Permit to Operate and which do not exceed the applicable Compliance Limits in Section 5.0) shall submit to the APCO for approval, an emissions control plan of all actions. The control plan shall include a schedule of increments of progress that will be taken to comply with the requirements of the applicable NOx Compliance Limit in Section 5.0 and Compliance Schedule in Section 7.0 of District Rule 4703 (as amended 4/25/02). [District Rule 4703, 6.1.5] Federally Enforceable Through Title V Permit

39. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520 and 4703, 6.2.6] Federally Enforceable Through Title V Permit

40. Unit shall demonstrate compliance annually with NOx and CO emissions limits with the auxiliary burner in operation and not in operation. An annual demonstration of compliance with the auxiliary burner in operation is not required in any year in which the auxiliary burner is not operated at all in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of resumption of operation of the auxiliary burner. An annual demonstration of compliance with the auxiliary burner not in operation is not required in any year in which the auxiliary burner operated continuously in conjunction with the turbine in the preceding 12 months, in such case, the unit shall be compliance source tested within 60 days of shutdown of operation of the auxiliary burner. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit

41. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

42. Upon recommencing operation, the permittee shall operate and maintain a continuous monitoring and recording system to measure oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit

43. Upon recommencing operation, the continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, records of continuous emissions monitoring system shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of CEMs, and emission measurements. [District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

46. When designated as a dormant emissions unit, the permittee shall not be required to perform monitoring requirements or submit CEMs reports for any calendar quarter in which the unit is not operational. Permittee shall submit a CEMs written report to the District for each calendar quarter in which the unit operated due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0 and District Rule 2520, 9.6.1] Federally Enforceable Through Title V Permit

47. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

48. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEM. For planned CEM maintenance that will require the CEM system to be shut down more than 4 hours in a day or more than 12 hours in a calendar month, the operator shall notify the District at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

49. Upon recommencing operation, permittee shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 0.75 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 0.75 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

51. The following methods shall be used for testing required by this permit: NOx (ppmv) - EPA Method 7E, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B, Stack gas oxygen - EPA Method 3 or 3A, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, Fuel gas sulfur content - ASTM D3246 or double GC for H2S and Mercaptans, Fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [40 CFR 60.335(b) and District Rules 1081 and 4703] Federally Enforceable Through Title V Permit

52. Note: Formerly S-1511-362

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-882-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
WEMCO INDUCED GAS FLOTATION UNIT (# M301A) SERVED BY A VAPOR CONTROL SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using Table 2-4 Oil and Gas Production Operations Average Emissions factors from the EPA Protocol for Equipment Leak Emissions Estimates EPA-453/R-95-017 for Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline shall not exceed 14.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background from components other than those associated with the Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from components associated with the Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-884-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
84,000 GALLON SAND DUMP TANK (F601) VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-843 AND PIPING TO SULFUR SCRUBBING SYSTEM S-1547-819. - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. H2S concentration in tank vapor space shall not exceed 20,000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold an organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-376. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-885-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS (AND VAPOR RECOVERY GAS) FIRED STEAM GENERATOR WITH A COEN ULN BURNER AND FLUE GAS RECIRCULATION (MOCO #803) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational vapor recovery gas volumetric flow meter whenever unit is connected to the vapor recovery gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Unit may be disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter removed (or replaced). Permittee shall keep a written record of the date(s) when the unit is disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter is removed (or replaced). [District Rule 1080] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following limits: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rule 2201; 4305, 5.1; and 4306, 5.1] Federally Enforceable Through Title V Permit
6. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
13. Formerly S-1511-379 [District Rule 2201] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-886-20 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS (AND VAPOR RECOVERY GAS) FIRED STEAM GENERATOR WITH A COEN ULN BURNER AND FLUE GAS RECIRCULATION (MOCO #801) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational fuel gas volumetric flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Steam generator shall be equipped with operational vapor recovery gas volumetric flow meter whenever unit is connected to the vapor recovery gas supply. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Unit may be disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter removed (or replaced). Permittee shall keep a written record of the date(s) when the unit is disconnected (or reconnected) at the vapor recovery gas supply and the vapor recovery gas volumetric flow meter is removed (or replaced). [District Rule 1080] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following limits: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rule 2201 and District Rules 2520, 9.1; 4] Federally Enforceable Through Title V Permit
6. Permittee shall maintain daily records of quantity and higher heating value of natural gas and vapor recovery gas burned in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
8. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
9. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
10. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
12. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
13. Formerly S-1511-380 [District Rule 2201] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-888-21 **EXPIRATION DATE:** 05/31/2022

SECTION: SW2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
7500 BBL (315,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4304 VENTED TO SHARED VAPOR CONTROL SYSTEM WITH COMPRESSOR(S), PUMP(S), COOLER(S) LIQUID KNOCKOUT(S), PRESSURE VESSEL(S), PIPING TO S-1547-359, AND PIPING TO THE SECTION 32 GAS PLANT (FACILITY S-1543)

PERMIT UNIT REQUIREMENTS

1. The following Dehy 2 permit units shall be tied into the shared vapor recovery system, TEOR S-1547-359: '-888 , '-889, '-892, '-893, '-894, '-895, '-896, '-897, '-898, '-899, '-902, '-903, '-904, '-905, '-906, '-949, '-950, '-951, '-1014, '-1015, '-1019, '-1116, '-1117, '-1119, '-1123, '-1124, and '-1345. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This vapor recovery system is authorized to receive recovered gas from the Anderson/Fitzgerald Dehydration facility including units S-1547-704, '-1100, '-1101, '-1102, '-1115, and '-1121. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line prior to intertie with TEOR S-1547-359 shall not exceed 96.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for tank and tank vapor control system, including vapor control system trunk line, according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature and true vapor pressure of liquids stored. [District Rule 4623] Federally Enforceable Through Title V Permit
6. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Note: Formerly S-1511-398. [District Rule 2201] Federally Enforceable Through Title V Permit
8. DEHY 2 VAPOR RECOVERY CONDITION: Tank or vessel shall vent only to vapor control system listed on PTO S-1547-888, except during periods of Tank or vessel cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
9. DEHY 2 VAPOR RECOVERY CONDITION: Except during authorized tank cleaning operations, the operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the tank pressure relief valve settings. The operator shall verify vapor recovery compressor activation pressures on quarterly basis to ensure that compressor activation pressure does not exceed tank pressure relief valve setting. [District Rule 2520] Federally Enforceable Through Title V Permit
10. DEHY 2 VAPOR RECOVERY CONDITION: Excluding pressure vessels as defined in Rule 4623, drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. DEHY 2 VAPOR RECOVERY CONDITION: Excluding pressure vessels as defined in Rule 4623, the tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
12. DEHY 2 VAPOR RECOVERY CONDITION: Excluding pressure vessels as defined in Rule 4623, all tank seams, joints, piping, valves and fittings shall be constructed and maintained in a leak-free condition except during interior tank cleaning. [District Rule 4623] Federally Enforceable Through Title V Permit
13. DEHY 2 VAPOR RECOVERY CONDITION: Pressure vessel (as defined in Rule 4623) vapor control system, including piping, valves, and fittings, shall be maintained leak-free, except during periods of vessel cleaning, vapor control system maintenance, and power outages due to a voluntary demand reduction program. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
14. DEHY 2 VAPOR RECOVERY CONDITION: Any tank or vessel gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
15. DEHY 2 VAPOR RECOVERY CONDITION: A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
16. DEHY 2 VAPOR RECOVERY CONDITION: Except as otherwise provided in this permit, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
17. DEHY 2 VAPOR RECOVERY CONDITION: Except during periods of vapor control system maintenance, power outages, and cleaning, vapor collection and control system shall operate with a minimum efficiency of 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
18. DEHY 2 VAPOR RECOVERY CONDITION: Pressure vessel (as defined in Rule 4623) shall have an operational flow check valve shall be operational (except during times when vapor control system line is closed) downstream of the units dome gas separator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, this permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit
20. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit
21. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit
22. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, when storing organic liquid that has a TVP that is 0.5 psia or greater, the permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rules 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; or 4) for free-water knockout tanks only, tank shall be degassed by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced. [District Rules 4623] Federally Enforceable Through Title V Permit

24. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, while performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rules 4623] Federally Enforceable Through Title V Permit

25. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, while performing tank cleaning activities, steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rules 4623] Federally Enforceable Through Title V Permit

26. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, while performing tank cleaning activities, permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit

27. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, during tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rules 4623] Federally Enforceable Through Title V Permit

28. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, to facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rules 4623] Federally Enforceable Through Title V Permit

29. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, this tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rules 4623] Federally Enforceable Through Title V Permit

30. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, after a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rules 4623] Federally Enforceable Through Title V Permit

31. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, when storing an organic liquid that has a TVP that is 1.5 psia or higher, during sludge removal the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rules 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. DEHY 2 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, when storing an organic liquid that has a TVP that is 1.5 psia or higher, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rules 4623] Federally Enforceable Through Title V Permit

33. DEHY 2 CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall have all solids removed from vessel during normal operation shall be sent to sand basin permitted as S-1547-842, '1137, or 1138 or transferred offsite. [District Rule 2201] Federally Enforceable Through Title V Permit

34. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, all piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 4623] Federally Enforceable Through Title V Permit

35. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, if any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 4623] Federally Enforceable Through Title V Permit

36. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rules 4623] Federally Enforceable Through Title V Permit

37. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit or District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of SJVUAPCD Rule 4623. [District Rules 4623] Federally Enforceable Through Title V Permit

38. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, if a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rules 4623] Federally Enforceable Through Title V Permit

39. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, any component found to be leaking on two consecutive annual inspections is in violation of SJVUAPCD Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 4623] Federally Enforceable Through Title V Permit

40. DEHY 2 INSPECTION CONDITION: Excluding pressure vessels as defined in Rule 4623, operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

41. DEHY 2 INSPECTION CONDITION: All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) shall have all piping, fittings, and valves directly affixed to the vessel or associated with the vessel vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520] Federally Enforceable Through Title V Permit

43. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) shall have an operator maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520] Federally Enforceable Through Title V Permit

44. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) shall have an operator reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit

45. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) shall have any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520] Federally Enforceable Through Title V Permit

46. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) shall have a facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520] Federally Enforceable Through Title V Permit

47. DEHY 2 INSPECTION CONDITION: Pressure vessel (as defined in Rule 4623) emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520] Federally Enforceable Through Title V Permit

48. DEHY 2 INSPECTION CONDITION: If the pressure vessel (as defined in Rule 4623) leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-889-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
315,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK F-4305 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 5.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-399. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-892-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4001 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 8.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-409 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-893-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4002 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 7.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-410 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-894-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4003 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 6.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-411 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-895-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4004 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor control system shall not exceed 6.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-412 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-896-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4005 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 7.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-413 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-897-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.6 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4006 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 5.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-414 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-898-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
23,500 GALLON CONDENSATE FWKO D-4701 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 22.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-415 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-899-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
23,500 GALLON CONDENSATE FWKO D-4702 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 12.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count for the vapor recovery system and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-416 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-902-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
SURGE VESSEL D-4601 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. Vessel and all vessel appurtenances shall be maintained leak-free, as defined in Rule 4623, except during periods of vessel cleaning, vapor control system maintenance, and power outages due to a voluntary demand reduction program. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Vessel shall be designed and maintained to vent only to vapor collection system, permit S-1547-888, except during periods of vessel cleaning, vapor control system maintenance, and power outages due to a voluntary demand reduction program. [District NSR Rule] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 6.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Note: Formerly S-1511-424 [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-903-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,908 GALLON INDUCED STATIC FLOATATION CELL D-4501 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 12.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-425 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-904-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,908 GALLON INDUCED STATIC FLOATATION CELL D-4502 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 11.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-426 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-905-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,908 GALLON INDUCED STATIC FLOATATION CELL D-4503 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 13.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-427 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-906-10 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
13.5 FT X 80 FT FREEWATER KNOCKOUT VESSEL D-4007 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE LEASE

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 14.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count for the vapor recovery system and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-431 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-907-5 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
138,900 GALLON SAND BASIN, LONGITUDINALLY DIVIDED INTO TWO CELLS, TOTAL LIQUID HOLDING AREA NOT TO EXCEED 72 FT. BY 46 FT., WITH DEWATERING EQUIPMENT, AND MISC. ELECTRIC PUMPS, TOTAL RATING LESS THAN 100 HP. - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Basin shall be used solely for separation of solids from liquids derived from Aera's Heavy Oil Western Stationary Source during normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emissions shall not exceed the following: VOC - 19.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Sand basin shall not operate as a sump as defined by Rule 4402. [District Rules 2201 and 4402] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-432

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-911-5 **EXPIRATION DATE:** 05/31/2022

SECTION: NW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
890 HP DIESEL-FIRED EMERGENCY STANDBY I.C. ENGINE POWERING AN ELECTRICAL GENERATOR - BELRIDGE

PERMIT UNIT REQUIREMENTS

1. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Engine shall be equipped with turbocharger and air to air aftercooler. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Engine shall be equipped with positive crankcase ventilation (PCV) system or 90% efficient control device for visible crankcase emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for required regulatory purposes and for start-up of cogeneration units S-1547-879, '880, '881, '148, '149, and '151 during utility power interruptions. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If engine exhibits visible emissions greater than 1/2 Ringelmann aggregating more than three minutes in any one hour, District witnessed compliance testing of particulate matter emissions shall be conducted by independent testing laboratory. [District Rule 2201& District Rule 1081, 4.0] Federally Enforceable Through Title V Permit
6. Official test results and field data of each compliance test shall be submitted to the District within 60 days after collection. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
7. This permit unit is approved to operate at only the following locations: SW/4 Sec. 2, T29S, R21E and SE/4 Sec. 32, T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
11. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
14. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4702, 5.7 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-912-7 **EXPIRATION DATE:** 05/31/2022

SECTION: SW26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
STEAM-ENHANCED CRUDE OIL PRODUCTION WELL OPERATION SERVING UP TO 69 STEAM ENHANCED WELLS, INCLUDING PIPING FOR BALANCING OF WELL VENTS (SOUDAN LEASE)

PERMIT UNIT REQUIREMENTS

1. Number of TEOR wells served by vapor control system shall not exceed 69 wells. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC emission rate from steam enhanced wells shall not exceed 2.21 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All condensate from each liquid knock-out drum shall be pumped only to production system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Compliance with Rule 4401 may be achieved by injection of vapor control system gas into Department of Oil, Gas, and Geothermal Resources (DOGGR) approved injection wells. [District Rule 2201] Federally Enforceable Through Title V Permit
5. TEOR vapors not re-injected to DOGGR approved wells shall be contained within a balanced casing vent collection system, or well casing vents shall be closed and produced fluids shall be handled only in controlled production equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Note: Formerly S-1511-445 [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-949-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
5000 BBL (210,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4301 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 10.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-509. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-950-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
5000 BBL (210,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4302 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 5.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-510. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-951-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
5000 BBL (210,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4303 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 13.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-511. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-964-3 **EXPIRATION DATE:** 05/31/2022

SECTION: SE23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
42,000 GALLON FIXED ROOF CRUDE OIL SHIPPING TANK #TA007762. - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. True vapor pressure of any liquid placed, stored, or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
2. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4] Federally Enforceable Through Title V Permit
3. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
4. Operator shall keep accurate records of each liquid stored in the tank including its storage temperature, true vapor pressure (TVP) and API gravity make such records readily available for district inspection upon request. [District Rule 4623, 6.3.1] Federally Enforceable Through Title V Permit
5. Note: Formerly S-1511-551

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-990-13 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
HEATER TREATER AND A HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM (LOST HILLS) WITH A PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS)

PERMIT UNIT REQUIREMENTS

1. Vessel shall be designed and maintained to vent only to vapor control system listed on PTO S-1547-854, except during periods of vessel cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
2. During periods of vapor control system maintenance and power outages, vapor control system shall operate with a minimum efficiency of 90%, achieved through the use of an operation pressure/vacuum vent and vapor balance system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Total fugitive VOC emission rate from vapor recovery components associated with this emission unit shall not exceed 11.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any vessel gauging or sampling device or other appurtenance in vapor service on a vessel vented to the vapor recovery system shall be equipped with a cover, which shall be closed at all times except during gauging, sampling, vessel cleaning or when repairing or performing maintenance on a sampling or gauging device or other appurtenance. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except for periods of tank or vessel cleaning, vapor control system maintenance or power outages, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of vapor control system maintenance, power outages and records of hours of tank and knockout vessel cleaning. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Formerly S-1511-621. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to the Lost Hills 2 Dehy Inspection Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-991-13 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
HEATER TREATER AND HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM (LOST HILLS) WITH A PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS)

PERMIT UNIT REQUIREMENTS

1. Vessel shall be designed and maintained to vent only to vapor control system listed on PTO S-1547-854, except during periods of vessel cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
2. During periods of vapor control system maintenance and power outages, vapor control system shall operate with a minimum efficiency of 90%, achieved through the use of an operation pressure/vacuum vent and vapor balance system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total fugitive VOC emission rate from vapor recovery components associated with this emission unit shall not exceed 11.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any vessel gauging or sampling device or other appurtenance in vapor service on a vessel vented to the vapor recovery system shall be equipped with a cover, which shall be closed at all times except during gauging, sampling, vessel cleaning or when repairing or performing maintenance on a sampling or gauging device or other appurtenance. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except for periods of tank or vessel cleaning, vapor control system maintenance or power outages, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of vapor control system maintenance, power outages and records of hours of tank and knockout vessel cleaning. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Formerly S-1511-622. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to the Lost Hills 2 Dehy Inspection Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-992-12 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH A HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM (LOST HILLS) WITH A PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS)

PERMIT UNIT REQUIREMENTS

1. Vessel shall be designed and maintained to vent only to vapor control system listed on PTO S-1547-854, except during periods of vessel cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
2. During periods of vapor control system maintenance and power outages, vapor control system shall operate with a minimum efficiency of 90%, achieved through the use of an operation pressure/vacuum vent and vapor balance system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Total fugitive VOC emission rate from vapor recovery components associated with this emission unit shall not exceed 12.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Any vessel gauging or sampling device or other appurtenance in vapor service on a vessel vented to the vapor recovery system shall be equipped with a cover, which shall be closed at all times except during gauging, sampling, vessel cleaning or when repairing or performing maintenance on a sampling or gauging device or other appurtenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except for periods of tank or vessel cleaning, vapor control system maintenance or power outages, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate records of vapor control system maintenance, power outages and records of hours of tank and knockout vessel cleaning. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4307, 6.1] Federally Enforceable Through Title V Permit
8. Formerly S-1511-623. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to the Lost Hills 2 Dehy Inspection Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-994-19 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10 FT X 50 FT (700 BBL) FWKO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Heater treater and appurtenances shall be maintained leak-free (as defined in Rule 4623) except during periods of unit maintenance or cleaning, vapor control system maintenance, and power curtailment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-627. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-995-18 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10 FT X 50 FT (700 BBL) FWKO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Vessel covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Note: Formerly S-1511-628 [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-998-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH PERMIT EXEMPT BURNER AND SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 (NORTH MIDWAY UNIT B-101B - ALBERTA SHALE LEASE)

PERMIT UNIT REQUIREMENTS

1. Vessel covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-631. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-999-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH PERMIT EXEMPT BURNER AND HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION AND SERVED BY VAPOR CONTROL LISTED ON S-1547-865 (NORTH MIDWAY UNIT B-101C - ALBERTA SHALE LEASE)

PERMIT UNIT REQUIREMENTS

1. Vessel covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-632. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1000-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH PERMIT EXEMPT BURNER AND SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 (NORTH MIDWAY UNIT B-201A - FINLEY LEASE)

PERMIT UNIT REQUIREMENTS

1. Vessel covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance not to exceed 1 hour each per occurrence. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-644 [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1001-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH PERMIT EXEMPT BURNER AND SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-865 (NORTH MIDWAY UNIT B-201C - FINLEY LEASE)

PERMIT UNIT REQUIREMENTS

1. Vessel covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-634. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the AFS Dehy Inspection Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1005-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER (#D201A) AND HEAT CROSSOVER LINE TO UNFIRED HEATER TREATER SECTION WITH VAPOR CONTROL SYSTEM LISTED ON S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-640. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1006-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER AND HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION AND A FLUID TREATMENT CHAMBER SERVED BY A VAPOR RECOVERY SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-883, '-884, '-1005 TO '-1011, AND '-1025), AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-641 [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1007-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS /LPG-FIRED, 5.0 MMBTU/HR OR LESS) (#D201C) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Note: Formerly S-1511-642. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1008-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (#D201D) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-643. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1009-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (#D201E) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-644. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1010-16 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER WITH HEAT CROSSOVER LINE TO THE UNFIRED HEATER TREATER SECTION, VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (#D201F) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Formerly S-1511-645. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1011-17 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
HEATER TREATER (#D201G) WITH A FLUID TREATMENT CHAMBER SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1547-843, AND PERMIT EXEMPT BURNER (NATURAL GAS-FIRED, 5.0 MMBTU/HR OR LESS) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Note: Formerly S-1511-646. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1014-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
7500 BBL (315,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4306 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 8.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-659 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1015-11 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
7500 BBL (315,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK F-4307 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 5.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Note: Formerly S-1511-660 [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1016-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
12 FT. DIA. X 60 FT. LONG FREE WATER KNOCKOUT VESSEL VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. FWKO vessel shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. FWKO vessel shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from this vessel shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in collected FWKO vessel vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this vessel and the associated tank vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1017-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
12 FT. DIA. X 60 FT. LONG FREE WATER KNOCKOUT VESSEL VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. FWKO vessel shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. FWKO vessel shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from this vessel shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in collected FWKO vessel vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this vessel and the associated tank vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1018-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
210,000 GALLON OIL PROCESSING TANK VENTED TO VAPOR CONTROL LISTED ON S-1547-865 - NORTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented only to vapor control system described on permit S-1547-865. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC fugitive emissions from the tank and gas components serving the tank battery shall not exceed 3.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC content of hydrocarbons in tank vapors (VOC/THC) shall not exceed 25%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for this tank and the vapor control system and resulting emissions calculated using Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit is subject to the AFS Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-865. Deviations from a standard condition shall be reported under the applicable condition in S-1547-865. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1019-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SW2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,908 GALLON INDUCED STATIC FLOATATION CELL FIXED D-4504 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 - SOUTH BELRIDGE FIELD

PERMIT UNIT REQUIREMENTS

1. During periods of vapor control system maintenance and power outages, vapor control system shall operate with a minimum efficiency of 90%, achieved through the use of an operational pressure/vacuum vent and a vapor balanced system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 17.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Note: Formerly S-1511-671 [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888.

[District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1025-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
WEMCO MODEL 120X INDUCED GAS FLOATATION UNIT SERVED BY A VAPOR CONTROL SYSTEM (VRS SERVES PERMITS S-1547-843 TO '-853, '-882, '-884, '-1005 TO '-1011, AND '-1025) - SOUTH MIDWAY

PERMIT UNIT REQUIREMENTS

1. Flotation unit shall be operated with a constant liquid level. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Fugitive VOC emissions rate, calculated using Table 2-4 Oil and Gas Production Operations Average Emissions factors from the EPA Protocol for Equipment Leak Emissions Estimates EPA-453/R-95-017 for Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline shall not exceed 14.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background from components other than those associated with the Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from components associated with the Wemco, new 10" diameter main vapor collection pipeline, and four 4" diameter vapor recovery lines (one on each cell) connecting the Wemco to the main vapor collection pipeline which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1030-16 **EXPIRATION DATE:** 05/31/2022

SECTION: SE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN MODEL QLN-ULN LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) (MOCO #805) (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational natural gas volumetric flow meters . [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201; 4305, 5.1 and 4306, 5.1] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 3.0 lb/day, VOC: 4..5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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, 5.1 and 5.3] Federally Enforceable Through Title V Permit
6. Facility shall operate this unit in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable federal, State and local air quality regulations. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
7. Visible emissions shall not exceed 10% opacity. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
8. Any relaxation in the District's Determination of Compliance conditions, Authority to Construct conditions, Permit to Operate conditions, or any other subsequent permit of legally binding document that could result in an increase of the potential to emit of any pollutant from this source above the PSD applicability thresholds will require a full PSD review of the source as if construction had not yet begun. [PSD SJ 89-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Facility shall have legal and operational responsibility and control of all air pollutant emitting activities of the MOCO TEOR project. This responsibility shall include, but not limited to: operating and maintaining the project to comply with all federal, state and local air pollution laws, regulations, permits, orders and other requirements; ensuring the emissions offsets or other reductions required for this project under permits issued by the District are obtained as required; any violation of any air pollution requirements are the legal responsibility of the facility in addition to any other legally responsible parties. Any proposed change to this condition shall require the prior written concurrence of the EPA. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
10. Facility is required to implement the conditions required by the U.S. Fish and Wildlife Service, as outlined in their Biological Opinion and Formal Consultation Response (August 30, 1990), to prevent the incidental taking (killing, harming or harassment) of endangered species that may be affected by this unit. [PSD SJ 89-01] Federally Enforceable Through Title V Permit
11. NOTE: Formerly S-1511-378 [District Rule 2201] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1034-21 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A FLUE GAS RECIRCULATION (#11-1I) (BELRIDGE) WITH A COEN MODEL QLN-ULN LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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, 13.2] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 4102] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The exhaust stack shall not be made any lower than 24 feet above ground level. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Natural gas fuel sulfur content shall not exceed 0.47 gr S/100 scf. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
6. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.0013 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 4101, 4102, 4301, 4405, 4406, and 4] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 2.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1035-24 **EXPIRATION DATE:** 05/31/2022

SECTION: NW11 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR WITH WITH A COEN MODEL QLN-ULN LOW NOX BURNER AND FLUE GAS RECIRCULATION (#11-1J) (BELRIDGE)

PERMIT UNIT REQUIREMENTS

1. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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, 13.2] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 0.47 gr S/100 scf. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
5. The exhaust stack shall not be made any lower than 24 feet above ground level. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
6. The total gas fired in this unit, on a monthly volume basis, shall be less than 50% PUC quality natural gas (as defined in Rule 4320), by volume. [District Rule 4320, 5.2] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of the volume of PUC quality natural gas (as defined in Rule 4320) and the total gas fired in this unit. Permittee shall keep monthly records of the percentage by volume of PUC quality gas fired and indicate if the volume of PUC quality gas fired is less than 50%. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit
8. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.0013 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.011 lb/MMBtu or 9 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 4101, 4102, 4301, 4405, 4406, and 4] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed any of the following: PM10: 7.5 lb/day, SOx (as SO2): 2.0 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 6023 lb/year, or CO: 45.0 lb/day [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with fuel sulfur limit(s) can be demonstrated either by monitoring sulfur content at location(s) after all fuel sources are combined prior to incineration, or by monitoring the sulfur content and volume of each fuel source and performing mass balance calculations. Records of monitoring locations, detected sulfur concentrations, and mass balance calculations, if necessary, shall be maintained and kept onsite and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
12. For each steam generator site downstream of H2S scavenger chemical injection points, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a daily basis utilizing Draeger tubes calibrated for existing sulfur species or other District-approved fuel sulfur detection method(s) or device(s). If compliance with fuel sulfur content limit(s) for the affected steam generators is demonstrated for 5 consecutive days, then the monitoring frequency shall be weekly. [District Rules 4305, 6.3; 4306, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1059-8 **EXPIRATION DATE:** 05/31/2022

SECTION: NW13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR GAS-FIRED NATIONAL STEAM GENERATOR (HSG #180; DIS# 20616-81) WITH NORTH AMERICAN BURNER (TAYLOR LEASE)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. No modification to this unit shall be performed without an ATC for that modification except as described in condition 3 below. [District Rule 2010] Federally Enforceable Through Title V Permit
5. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of a compliant DEU. [District Rule 2080] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the indicated emissions limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 2080, 4305, 6.3; 4305, 6.3 and 4320, 6.3] Federally Enforceable Through Title V Permit
8. In accordance with the provisions of Rule 4305 Section 7.4, amended 12/19/96, this unit may only be operated after the permittee has submitted an application for Authority to Construct for any modification necessary to comply with Rule 4305. [District Rule 2010 and 4305]
9. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080] Federally Enforceable Through Title V Permit
10. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2080] Federally Enforceable Through Title V Permit
11. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
12. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emissions assessed to the SLC for this unit are PM10: 9.6 lb/day, SOx (as SO2): 1.1 lb/day, NOx (as NO2): 54.0 lb/day, VOC: 2.9 lb/day, and CO: 6.7 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 545.6 lb/day, SOx (as SO2): 6,237.6 lb/day, NOx (as NO2): 1,708.6 lb/day, VOC: 59.8 lb/day, and CO: 282.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
24. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [District Rules 4405 and 4406] Federally Enforceable Through Title V Permit
25. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrate, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Note: Formerly S-1129-39.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1060-16 **EXPIRATION DATE:** 05/31/2022

SECTION: 13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION WITH SELECTIVE CATALYTIC REDUCTION (SCR) LOST HILLS UNIT #4

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Cogeneration unit shall include Allison Model 501-KB-5 48.7 MMBTU/hr gas-fired engine, synchronous electrical generator, unfired 22.5 MMBTU/hr steam generator, and inlet air evaporative cooler. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Turbine lube oil tank and generator gearbox lube oil tank shall vent only through fiber bed filter system or other District-approved control Device. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
10. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
11. Gas turbine engine shall be equipped with water injection system for NOx control. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Gas turbine engine shall be equipped with continuously recording water to fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201& 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. If ammonia injection system is inoperative for more than 1 hour, gas turbine shall be shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Evaporative cooler shall use only fresh and filtered water. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance testing of lube oil vent and gearbox vent shall be required if visible emissions from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The ammonia (NH3) emissions from the exhaust of the SCR system serving this gas turbine shall not exceed 30 ppmvd. [District Rule 4102]
20. Permittee shall maintain accurate records of ammonia consumption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit
21. Gas temperature at SCR catalyst section inlet shall be continuously monitored by operational temperature indicator. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer and determined by performance tests. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
22. Permittee shall install, operate and maintain in calibration a system which continuously measures and records ammonia injection flow rate and pressure. Ammonia injection flow rate and pressure shall be operated within the range recommended by SCR manufacturer and determined by performance tests such that the turbine maintains 95% or greater control efficiency or complies with the applicable NOx emission concentration limit. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
23. Except during startup, shutdown, and reduced load periods, any one-hour period during which the average ammonia injection flowrate, as measured by the continuous monitoring system, falls outside the flowrate range as determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average ammonia injection flowrate, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
24. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S) or 1.1 gr/100 scf as total fuel sulfur. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 1.1 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 1.1 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Except during periods of startup and shutdown emissions rates (three hour rolling average) shall not exceed any of the following: NOx (as NO2): 5 ppmv dry @ 15% O2, CO: 41 ppmv dry @ 15% O2. [District Rule 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
27. Startup and shutdown of the gas turbine, as defined in this permit and in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and two hours for shutdown, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit except during shutdown. [40 CFR Subpart A 60.2 and District Rule 4703] Federally Enforceable Through Title V Permit
28. The duration of reduced load shall not exceed a time period of one hour per occurrence. [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Emissions shall not exceed any of the following limits: NOx (as NO2); 150.7 lb/day, CO: 107.5 lb/day, PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day or VOC: 39.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Daily records of NOx and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Maximum NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [40 CFR 60.332(a)(2) & 60.333(a)] Federally Enforceable Through Title V Permit

32. Source testing to measure exhaust gas NOx, CO, and NH3 concentrations and, if applicable, Selective Catalytic Reduction (SCR) control efficiency shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). Performance testing shall be conducted under conditions representative of normal operation. [40 CFR 60.335(b), District Rule 4703, 6.3 & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

33. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D1072, D4468 or ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D3598, D1826 or D1945 in conjunction with ASTM D3588, Ammonia slip - BAAQMD method ST-1B. [40 CFR 60.335(b) and District Rules 1081 & 4703] Federally Enforceable Through Title V Permit

34. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

35. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

36. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit

37. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once every month in which a source test is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the previous calendar month. [District Rule 4703] Federally Enforceable Through Title V Permit

38. If the NOx or CO concentrations corrected to 15% O2 as measured by the portable analyzer or the NH3 concentration, as measured by Draeger tubes or a District approved equivalent method, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4703] Federally Enforceable Through Title V Permit

39. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not be recognized as a basis for a Rule 1100 enforcement exemption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4703] Federally Enforceable Through Title V Permit

41. Ammonia emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. [District Rule 4703] Federally Enforceable Through Title V Permit

42. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rule 4703] Federally Enforceable Through Title V Permit

43. Permittee shall report the following emission exceedance to the District: emission rates of NOx & CO on a three-hour rolling average and NSPS emission rate on one hour average. [District Rule 1070, 2201 and 4703] Federally Enforceable Through Title V Permit

44. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. This information may be recorded electronically. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520, 9.4.2 & 4703, 6.2.4] Federally Enforceable Through Title V Permit

45. Permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

46. Permittee shall comply in full with Rule 4001 (New Source Performance Standards, 40 CFR 60 Subpart GG) requirements, including notification, recordkeeping and monitoring requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

47. The owner or operator shall maintain all records for a period of five years from the date of entry and shall make such records available to the APCO upon request. [District Rules 1080, 2201, & 4703, 6.2.4] Federally Enforceable Through Title V Permit

48. Note: Formerly S-1129-50.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1061-13 **EXPIRATION DATE:** 05/31/2022

SECTION: 13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION WITH SELECTIVE CATALYTIC REDUCTION (SCR) - LOST HILLS UNIT #5

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Cogeneration unit shall include Allison Model 501-KB-5 48.7 MMBTU/hr gas-fired engine, synchronous electrical generator, unfired 22.5 MMBTU/hr steam generator, and inlet air evaporative cooler. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Turbine lube oil tank and generator gearbox lube oil tank shall vent only through fiber bed filter system or other District-approved control Device. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
10. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
11. Gas turbine engine shall be equipped with water injection system for NOx control. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Gas turbine engine shall be equipped with continuously recording water to fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201& 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. If ammonia injection system is inoperative for more than 1 hour, gas turbine shall be shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Evaporative cooler shall use only fresh and filtered water. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance testing of lube oil vent and gearbox vent shall be required if visible emissions from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The ammonia (NH3) emissions from the exhaust of the SCR system serving this gas turbine shall not exceed 30 ppmvd. [District Rule 4102]
20. Permittee shall maintain accurate records of ammonia consumption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit
21. Gas temperature at SCR catalyst section inlet shall be continuously monitored by operational temperature indicator. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer and determined by performance tests. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
22. Permittee shall install, operate and maintain in calibration a system which continuously measures and records ammonia injection flow rate and pressure. Ammonia injection flow rate and pressure shall be operated within the range recommended by SCR manufacturer and determined by performance tests such that the turbine maintains 95% or greater control efficiency or complies with the applicable NOx emission concentration limit. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
23. Except during startup, shutdown, and reduced load periods, any one-hour period during which the average ammonia injection flowrate, as measured by the continuous monitoring system, falls outside the flowrate range as determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average ammonia injection flowrate, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
24. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S) or 1.1 gr/100 scf as total fuel sulfur. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 1.1 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 1.1 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Except during periods of startup and shutdown emissions rates (three hour rolling average) shall not exceed any of the following: NOx (as NO2): 5 ppmv dry @ 15% O2, CO: 41 ppmv dry @ 15% O2. [District Rule 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
27. Startup and shutdown of the gas turbine, as defined in this permit and in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and two hours for shutdown, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit except during shutdown. [40 CFR Subpart A 60.2 and District Rule 4703] Federally Enforceable Through Title V Permit
28. The duration of reduced load shall not exceed a time period of one hour per occurrence. [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Emissions shall not exceed any of the following limits: NOx (as NO2); 150.7 lb/day, CO: 107.5 lb/day, PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day or VOC: 39.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Daily records of NOx and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Maximum NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [40 CFR 60.332(a)(2) & 60.333(a)] Federally Enforceable Through Title V Permit

32. Source testing to measure exhaust gas NOx, CO, and NH3 concentrations and, if applicable, Selective Catalytic Reduction (SCR) control efficiency shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). Performance testing shall be conducted under conditions representative of normal operation. [40 CFR 60.335(b), District Rule 4703, 6.3 & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

33. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D1072, D4468 or ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D3598, D1826 or D1945 in conjunction with ASTM D3588, Ammonia slip - BAAQMD method ST-1B. [40 CFR 60.335(b) and District Rules 1081 & 4703] Federally Enforceable Through Title V Permit

34. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

35. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

36. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit

37. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once every month in which a source test is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the previous calendar month. [District Rule 4703] Federally Enforceable Through Title V Permit

38. If the NOx or CO concentrations corrected to 15% O2 as measured by the portable analyzer or the NH3 concentration, as measured by Draeger tubes or a District approved equivalent method, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4703] Federally Enforceable Through Title V Permit

39. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not be recognized as a basis for a Rule 1100 enforcement exemption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Ammonia emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. [District Rule 4703] Federally Enforceable Through Title V Permit
42. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Permittee shall report the following emission exceedance to the District: emission rates of NOx & CO on a three-hour rolling average and NSPS emission rate on one hour average. [District Rule 1070, 2201 and 4703] Federally Enforceable Through Title V Permit
44. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. This information may be recorded electronically. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520, 9.4.2 & 4703, 6.2.4] Federally Enforceable Through Title V Permit
45. Permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit
46. Permittee shall comply in full with Rule 4001 (New Source Performance Standards, 40 CFR 60 Subpart GG) requirements, including notification, recordkeeping and monitoring requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
47. The owner or operator shall maintain all records for a period of five years from the date of entry and shall make such records available to the APCO upon request. [District Rules 1080, 2201, & 4703, 6.2.4] Federally Enforceable Through Title V Permit
48. Note: Formerly S-1129-51.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1062-14 **EXPIRATION DATE:** 05/31/2022

SECTION: 13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION WITH SELECTIVE CATALYTIC REDUCTION (SCR) LOST HILLS UNIT #6

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Cogeneration unit shall include Allison Model 501-KB-5 48.7 MMBTU/hr gas-fired engine, synchronous electrical generator, unfired 22.5 MMBTU/hr steam generator, and inlet air evaporative cooler. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Turbine lube oil tank and generator gearbox lube oil tank shall vent only through fiber bed filter system or other District-approved control Device. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
10. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
11. Gas turbine engine shall be equipped with water injection system for NOx control. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at a water-to-fuel ratio documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Gas turbine engine shall be equipped with continuously recording water to fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201& 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. If ammonia injection system is inoperative for more than 1 hour, gas turbine shall be shut down. [District Rule 4102]
15. Evaporative cooler shall use only fresh and filtered water. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Compliance testing of lube oil vent and gearbox vent shall be required if visible emissions from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The ammonia (NH3) emissions from the exhaust of the SCR system serving this gas turbine shall not exceed 30 ppmvd. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain accurate records of ammonia consumption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit
21. Gas temperature at SCR catalyst section inlet shall be continuously monitored by operational temperature indicator. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer and determined by performance tests. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
22. Permittee shall install, operate and maintain in calibration a system which continuously measures and records ammonia injection flow rate and pressure. Ammonia injection flow rate and pressure shall be operated within the range recommended by SCR manufacturer and determined by performance tests such that the turbine maintains 95% or greater control efficiency or complies with the applicable NOx emission concentration limit. [40 CFR 60.334(a) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
23. Except during startup, shutdown, and reduced load periods, any one-hour period during which the average ammonia injection flowrate, as measured by the continuous monitoring system, falls outside the flowrate range as determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average ammonia injection flowrate, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
24. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S) or 1.1 gr/100 scf as total fuel sulfur. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Fuel sulfur content for a fuel source shall be measured weekly. Test reports of measured fuel sulfur content shall be maintained. If measured sulfur content is less than 1.1 gr/100 scf for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If any semi-annual testing show fuel sulfur content exceeds 1.1 gr/100 scf, weekly testing shall resume and exceedance shall be reported to APCO. [40 CFR 60.334(b)(c) & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. Except during periods of startup and shutdown emissions rates (three hour rolling average) shall not exceed any of the following: NOx (as NO2): 5 ppmv dry @ 15% O2, CO: 41 ppmv dry @ 15% O2. [District Rule 4703, 5.1.2, 5.2] Federally Enforceable Through Title V Permit
27. Startup and shutdown of the gas turbine, as defined in this permit and in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours for startup and two hours for shutdown, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit except during shutdown. [40 CFR Subpart A 60.2 and District Rule 4703] Federally Enforceable Through Title V Permit
28. The duration of reduced load shall not exceed a time period of one hour per occurrence. [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit
29. Emissions shall not exceed any of the following limits: NOx (as NO2); 150.7 lb/day, CO: 107.5 lb/day, PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day or VOC: 39.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

30. Daily records of NOx and CO emission calculations during days of startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Maximum NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [40 CFR 60.332(a)(2) & 60.333(a)] Federally Enforceable Through Title V Permit

32. Source testing to measure exhaust gas NOx, CO, and NH3 concentrations and, if applicable, Selective Catalytic Reduction (SCR) control efficiency shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). Performance testing shall be conducted under conditions representative of normal operation. [40 CFR 60.335(b), District Rule 4703, 6.3 & District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

33. The following test methods shall be used: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100; and fuel gas sulfur content - ASTM D1072, D4468 or ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D3598, D1826 or D1945 in conjunction with ASTM D3588, Ammonia slip - BAAQMD method ST-1B. [40 CFR 60.335(b) and District Rules 1081 & 4703] Federally Enforceable Through Title V Permit

34. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

35. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

36. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit

37. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once every month in which a source test is not performed. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the previous calendar month. [District Rule 4703] Federally Enforceable Through Title V Permit

38. If the NOx or CO concentrations corrected to 15% O2 as measured by the portable analyzer or the NH3 concentration, as measured by Draeger tubes or a District approved equivalent method, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4703] Federally Enforceable Through Title V Permit

39. Failure of catalyst to perform as required because of catalyst poisoning or fouling shall not be recognized as a basis for a Rule 1100 enforcement exemption. [District Rule 1070 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. All NOx, CO, O2 and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4703] Federally Enforceable Through Title V Permit
41. Ammonia emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. [District Rule 4703] Federally Enforceable Through Title V Permit
42. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3 and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rule 4703] Federally Enforceable Through Title V Permit
43. Permittee shall report the following emission exceedance to the District: emission rates of NOx & CO on a three-hour rolling average and NSPS emission rate on one hour average. [District Rule 1070, 2201 and 4703] Federally Enforceable Through Title V Permit
44. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption for normal operation and for the startup/shutdown periods. This information may be recorded electronically. Daily entries in the operating log are not required for periods of non-operation. [District Rules 2520, 9.4.2 & 4703, 6.2.4] Federally Enforceable Through Title V Permit
45. Permittee shall maintain accurate records of all maintenance activities, periodic inspections, and repairs of SCR unit, water and NH3 injection systems, and their associated controller and instrumentation units. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit
46. Permittee shall comply in full with Rule 4001 (New Source Performance Standards, 40 CFR 60 Subpart GG) requirements, including notification, recordkeeping and monitoring requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
47. The owner or operator shall maintain all records for a period of five years from the date of entry and shall make such records available to the APCO upon request. [District Rules 1080, 2201, & 4703, 6.2.4] Federally Enforceable Through Title V Permit
48. Note: Formerly S-1129-52.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1063-9 **EXPIRATION DATE:** 05/31/2022

SECTION: 13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 146 STEAM-ENHANCED WELLS WITH CLOSED CASING VENTS (TAYLOR LEASE)

PERMIT UNIT REQUIREMENTS

1. Total uncontrolled VOC emissions from all well vents shall be reduced by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All produced fluids from all wells authorized by this permit shall be handled only in closed production equipment served by a 99% efficient vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions of Volatile Organic Compounds (VOC) shall not exceed 101.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1067-4 **EXPIRATION DATE:** 05/31/2022

SECTION: SE13 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
3,000 BARREL FIXED ROOF CRUDE OIL PRODUCTION TANK, DRAIN TANK (LOST HILLS FIELD)

PERMIT UNIT REQUIREMENTS

1. True vapor pressure of any liquid placed, stored, or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
2. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4] Federally Enforceable Through Title V Permit
3. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
4. Operator shall keep accurate records of each liquid stored in the tank including its storage temperature, true vapor pressure (TVP) and API gravity make such records readily available for district inspection upon request. [District Rule 4623, 6.3.1] Federally Enforceable Through Title V Permit
5. Note: Formerly S-1129-136.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1068-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
140 BHP DETROIT-ALLISON MODEL #50437001 DIESEL-FIRED IC ENGINE USED TO START A GAS TURBINE

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Operation of the engine shall not exceed 20 hours per year. Additional operating hours may be approved by the APCO if the permittee provides justification on a case-by-case basis. [District Rule 4702, 4.2.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. During operation of the engine, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
6. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the date and number of hours of operation and records of operational characteristics monitoring. [District Rules 4702, 5.7 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Note: Formerly S-1129-695.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1069-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
140 BHP DETROIT-ALLISON MODEL #50437001 DIESEL-FIRED IC ENGINE USED TO START A GAS TURBINE

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Operation of the engine shall not exceed 20 hours per year. Additional operating hours may be approved by the APCO if the permittee provides justification on a case-by-case basis. [District Rule 4702, 4.2.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. During operation of the engine, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
6. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the date and number of hours of operation and records of operational characteristics monitoring. [District Rules 4702, 5.7 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Note: Formerly S-1129-696.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1070-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
140 BHP DETROIT-ALLISON MODEL #50437001 DIESEL-FIRED IC ENGINE USED TO START A GAS TURBINE

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Operation of the engine shall not exceed 20 hours per year. Additional operating hours may be approved by the APCO if the permittee provides justification on a case-by-case basis. [District Rule 4702, 4.2.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. During operation of the engine, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
6. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the date and number of hours of operation and records of operational characteristics monitoring. [District Rules 4702, 5.7 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Note: Formerly S-1129-697.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1074-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW30 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR CE NATCO NATURAL GAS/TEOR FIRED STEAM GENERATOR #15 WITH NORTH AMERICAN MODEL #6131 BURNER, O2 ANALYZER/CONTROLLER AND THERMOTICS SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.034 lb/MMBTU, SOx (as S): 0.034 lb/MMBTU, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.007 lb/MMBTU, or CO: 50 ppmv @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
5. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
6. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
7. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
8. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
9. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
10. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
11. The permittee shall keep daily records of the amount of gas combusted, and the date and duration of scrubber operation, for a period of two years, and shall make records available for inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
12. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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
14. When utilizing scrubber, source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
15. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
16. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201 Rule] Federally Enforceable Through Title V Permit
17. This permit unit shall not be operated unless owner or operator apply to modify Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1075-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW30 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR CE NATCO NATURAL GAS/TEOR FIRED STEAM GENERATOR #16 WITH NORTH AMERICAN MODEL #6131 BURNER, O2 ANALYZER/CONTROLLER AND ANDERSON SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following limits: PM10: 0.034 lb/MMBTU, SOx (as S): 0.034 lb/MMBTU, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.007 lb/MMBTU, or CO: 50 ppmv @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
5. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall keep daily records of the amount of gas combusted, and the date and duration of scrubber operation, for a period of two years, and shall make records available for inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
12. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4701] Federally Enforceable Through Title V Permit
13. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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

15. When utilizing scrubber source testing to demonstrate compliance with SOx emission limit shall be conducted not less than once every 12 months. When not utilizing scrubber, fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

17. This permit unit shall not be operated unless owner or operator apply to modify Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1079-17 **EXPIRATION DATE:** 05/31/2022

SECTION: 30 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
THERMALLY-ENHANCED OIL RECOVERY OPERATION WITH 131 STEAM DRIVE WELLS WITH CASING VENT VAPOR COLLECTION AND CONTROL SYSTEM INCLUDING TWO AIR-COOLED HEAT EXCHANGERS AND TWO GAS COMPRESSORS

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Vapors collected from the well vent vapor collection and control system shall either be piped to the field gas gathering system, or the 2038 or 2972 steam plant (2038 consists of units S-1547-57, 59, 60, 61, 120, and 250; 2972 consists of units S-1547-77, 78, 123, 124, 135, 136, and 146), or TEOR system S-1547-359, or to DOGGR-approved injection wells. Alternatively, the wells can be operated with the casing vents closed. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Water/VOCs condensate from all liquid knockout drums shall be pumped to production manifold, recycled to productions wells for disposal, or pumped to vapor controlled storage tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions of volatile organic compounds (VOC) shall not exceed 236.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to TEOR Standard Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1086-7 **EXPIRATION DATE:** 05/31/2022

SECTION: 30 **TOWNSHIP:** 28S **RANGE:** 27E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR OIL-FIRED THERMOTICS STEAM GENERATOR (#11) WITH NORTH AMERICAN LO-NOX BURNER, HAUGE O2 CONTROLLER AND THERMOTICS SO2 SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emissions from this unit shall not exceed any of the following: PM10: 2.11 lb/hr, SOx (as S): 0.034 lb/MMBTU, VOC: 0.42 lb/hr, NOx (as NO2): 30 ppmv @3% O2; or CO: 50 ppmv @3% O2. [District Rule 4305] Federally Enforceable Through Title V Permit
5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201]
6. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District Rule 2201]
7. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Unit is authorized to burn TEOR S-1547-1079 gas. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Testing for gas sulfur content shall be conducted no less than monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

15. Compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
16. Compliance with NOx and CO emission limits shall be demonstrated not less than once every 36 months if compliance is demonstrated on two consecutive annual compliance tests. [District Rule 4305] Federally Enforceable Through Title V Permit
17. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit
18. 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
19. The permittee shall keep daily records of the amount of gas combusted, and the date and duration of scrubber operation, for a period of two years, and shall make records available for inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
20. This equipment shall not be operated for any reason until necessary retrofits are made so that the equipment is in full compliance with the applicable requirements of District Rule 4305. [District Rule 4305] Federally Enforceable Through Title V Permit
21. No modification to this unit shall be performed without an Authority to Construct permit for that modification, except for changes specified in Condition #3, below. [District Rule 2201] Federally Enforceable Through Title V Permit
22. All fuel supply lines shall be physically disconnected from this unit. [District Rule 4305] Federally Enforceable Through Title V Permit
23. Emissions from this unit shall not exceed any of the following: 30 ppmv NOx, corrected to 3% oxygen or 400 ppmv CO, corrected to 3% oxygen. [District Rule 4305] Federally Enforceable Through Title V Permit
24. A source test demonstrating compliance with the indicated emissions limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 1070] Federally Enforceable Through Title V Permit
25. Fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Excess combustion air shall be maintained at approximately 2.3% excess O2 by continuous operation of oxygen analyzer/controller. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Fuel oil sulfur content shall not exceed 1.2% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Scrubber liquor pH shall be maintained between 6.0 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Steam generator firebox, convection section, and all flue gas ductwork shall be free of visible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Emission rates shall not exceed the following PM10: 4.56 lb/hr, SOx (as SO2): 3.82 lb/hr, VOC: 2.03 lb/hr, and SO4: 1.70 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Note: Formerly S-1129-845.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1088-9 **EXPIRATION DATE:** 05/31/2022

SECTION: 12 **TOWNSHIP:** 28S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MM BTU/HR STRUTHERS NATURAL GAS-FRIED STEAM GENERATOR HSG-174

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following limits: PM10: 0.010 lb/MMBTU, SOx (as SO2): 0.002 lb/MMBTU, NOx(as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBTU, or CO: 400 ppmv @3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4701] Federally Enforceable Through Title V Permit
6. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
7. 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
8. This unit shall be fired exclusively on natural gas which may consist of one or a mixture of fuels including treated produced gas and purchased gas with a sulfur content not to exceed 0.70 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Fuel sulfur content shall be certified by a third party fuel supplier or compliance with sulfur compound emission limit shall be demonstrated not less than once every 12 months by fuel gas sulfur content analysis and higher heating value analysis of each fuel source. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Note: Formerly S-1129-847. [Note]
12. This permit unit shall not be operated unless owner or operator apply to modify Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1089-20 **EXPIRATION DATE:** 05/31/2022

SECTION: 15 **TOWNSHIP:** 27S **RANGE:** 19E

EQUIPMENT DESCRIPTION:
62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR WITH A COEN MODEL #QLN-ULN ULTRA LOW-NOX BURNER WITH FLUE GAS RECIRCULATION AND SO2 SCRUBBER LISTED ON S-1135-26 (HSG-186)

PERMIT UNIT REQUIREMENTS

1. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following: PM10: 0.0266 lb/MMBtu, SOx (as SO2): 9 ppmv @3% O2, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1 and 4306, 5.1 4320] Federally Enforceable Through Title V Permit
2. Emission rates shall not exceed any of the following: PM10: 39.9 lb/day, SOx (as SO2): 23.3 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
3. When steam generator exhaust is routed through scrubber, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When scrubber is bypassed, fuel gas sulfur content shall not exceed 5 grains of total sulfur per 100 dscf of fuel gas. [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. When steam generator exhaust is routed through the scrubber, permittee shall monitor and record scrubber liquor recirculation rate and pH at least once per month. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
6. Source testing to demonstrate compliance with SOx emission limits (SOx emission concentration or control efficiency) in this permit shall be conducted annually. Source testing may be deferred if scrubber is bypassed as authorized by this permit. Whenever the unit is switched to scrubbed operation, compliance source testing for SOX shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. Source testing of scrubber exhaust during operation of any one of the steam generators S-1135-26 or S-1547-1089 shall satisfy the testing requirement for this unit. [District Rules 2201 and 4320, 5.7] Federally Enforceable Through Title V Permit
7. Source testing to demonstrate compliance with the PM10 emission limit (lb/MMBtu) included in this permit shall be conducted concurrently with the initial compliance test for SOx and every three years thereafter. Source testing of scrubber exhaust during operation of any one of the steam generators S-1135-26 or S-1547-1089 when firing the maximum available quantity of waste gas shall satisfy the PM10 testing requirement for this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Note: Formerly S-1129-848. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1098-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW13 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG #181; DIS# 20622-81) WITH NORTH AMERICAN BURNER (TAYLOR LEASE)

PERMIT UNIT REQUIREMENTS

1. Operation of the unit is not authorized until modifications are made to comply with District Rules as authorized by an Authority to Construct. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301] Federally Enforceable Through Title V Permit
5. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080] Federally Enforceable Through Title V Permit
6. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2080] Federally Enforceable Through Title V Permit
7. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Maximum emission rates for permit unit shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [District Rules 4405 and 4406] Federally Enforceable Through Title V Permit
15. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, 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 and 4701] Federally Enforceable Through Title V Permit
17. Formerly S-1141-436-1

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1100-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SE26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
55,000 GALLON FREE-WATER KNOCKOUT VESSEL (V-200) WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1547-704(A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Vessel shall vent only to vapor control system listed in S-1547-704. [District Rule 2201] Federally Enforceable Through Title V Permit
2. FWKO covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
3. FWKO vessel cleaning shall not exceed once per calendar quarter and records (time & date of start and completion) of such cleaning shall be maintained and available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate shall not exceed 5.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for equipment according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201]
6. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17 and 3.18] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves directly affixed to the vessel or associated with the gas collection system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2]

10. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070]

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PERMIT UNIT: S-1547-1101-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SE26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
29,400 GALLON FREE-WATER KNOCKOUT VESSEL (V-220) WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1547-704 (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Vessel shall vent only to vapor control system listed in S-1547-704. [District Rule 2201]
2. FWKO covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201]
3. FWKO vessel cleaning shall not exceed once per calendar quarter and records (time & date of start and completion) of such cleaning shall be maintained and available for District inspection upon request. [District Rule 2201]
4. Fugitive VOC emission rate shall not exceed 5.4 lb/day. [District Rule 2201]
5. Permittee shall maintain with the permit accurate fugitive component counts for equipment according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201]
6. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17, 3.18] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves directly affixed to the vessel or associated with the gas collection system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070]

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PERMIT UNIT: S-1547-1102-8 **EXPIRATION DATE:** 05/31/2022

SECTION: SE26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
55,000 GALLON FREE-WATER KNOCKOUT VESSEL (V-230) WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1547-704 (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Vessel shall vent only to vapor control system listed in S-1547-704. [District Rule 2201] Federally Enforceable Through Title V Permit
2. FWKO covers, inspection hatches, etc. shall be maintained in leak-free (as defined in Rule 4623) condition except during vessel cleaning, repair and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
3. FWKO vessel cleaning shall not exceed once per calendar quarter and records (time & date of start and completion) of such cleaning shall be maintained and available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate shall not exceed 5.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for equipment according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17, 3.18] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves directly affixed to the vessel or associated with the gas collection system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
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PERMIT UNIT: S-1547-1104-4 **EXPIRATION DATE:** 05/31/2022

SECTION: SE 19 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
37,600 GALLON FREE-KNOCKOUT VESSEL WITH VAPOR COLLECTION (KING ELLIS LEASE)

PERMIT UNIT REQUIREMENTS

1. Collected vapors shall be discharged to the field gas gathering system, TEOR System S-1547-1079, or TEOR System S-1547-359. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC emission rate from components shall not exceed 15.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4 or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All piping, fittings, and valves directly affixed to the vessel or associated with the gas collection system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623, 3.11, 3.17, 3.18] Federally Enforceable Through Title V Permit

10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. Records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
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PERMIT UNIT: S-1547-1105-3 **EXPIRATION DATE:** 05/31/2022

SECTION: NW 33 **TOWNSHIP:** 28S **RANGE:** 21 E

EQUIPMENT DESCRIPTION:
1085 HP DETROIT DIESEL DIESEL-FIRED MODEL 16V-92 8163-7405 EMERGENCY IC ENGINE (#355) WITH TURBOCHARGER POWERING A 800 KW ELECTRICAL GENERATOR (HILL WATER SYSTEM)

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The exhaust stack shall not be fitted with a rain cap or similar device that would impede vertical exhaust flow. [District Rule 4102] Federally Enforceable Through Title V Permit
3. NOx emission shall not exceed 5.8 g/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The PM10 emission shall not exceed 0.16 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 2201, 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. This engine shall be monitored, operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. Examples of monitoring and maintenance are: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or check other operational characteristics as recommended by the manufacturer or supplier. [District Rule 4702] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4702 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

16. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

17. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1110-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
7,000 GALLON HYDROCHLORIC ACID STORAGE TANK (T19-12) WITH FUME SCRUBBER - SECTION 27 WATER PLANT

PERMIT UNIT REQUIREMENTS

1. Tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank fume scrubber shall be operated while adding HCl into the storage tank. [District Rule 4102]
3. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 4102]
4. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
5. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacture's listed scrubbing efficiency. [District Rule 4102]
6. Spent packed water column water shall be disposed of in a manner preventing acid emissions. [District Rule 4102]

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Air Pollution Control District

PERMIT UNIT: S-1547-1111-2 **EXPIRATION DATE:** 05/31/2022

SECTION: SE19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
15,000 GALLON HYDROCHLORIC ACID STORAGE TANK WITH FUME SCRUBBER - LOST HILLS TWO LEASE

PERMIT UNIT REQUIREMENTS

1. Tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank fume scrubber shall be operational while adding HCl into the storage tank. [District Rule 4102]
3. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 4102]
4. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
5. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacture's listed scrubbing efficiency. [District Rule 4102]
6. Spent packed water column water shall be disposed of in a manner preventing acid emissions. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1113-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
10,000 GALLON HYDROCHLORIC ACID STORAGE TANK WITH FUME SCRUBBER - SECTION 27 WATER PLANT

PERMIT UNIT REQUIREMENTS

1. Tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank fume scrubber shall be operated while adding HCl into the storage tank. [District Rule 4102]
3. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 4102]
4. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
5. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacture's listed scrubbing efficiency. [District Rule 4102]
6. Spent packed water column water shall be disposed of in a manner preventing acid emissions. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1114-2 **EXPIRATION DATE:** 05/31/2022

SECTION: SW28 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
2,730,000 GALLON (65,000 BBL) FIXED ROOF CRUDE OIL STORAGE TANK #T-471 WITH VAPOR CONTROL SYSTEM (SHARED WITH S-1547-384) INCLUDING COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S), AND PIPING TO FIELD GAS SYSTEM (ALSO PERMITTED AS S-1548-45 IN LOW SS)

PERMIT UNIT REQUIREMENTS

1. Tank shall vent only to vapor control system consisting of gas gathering system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank and tank vapor recovery system, including all piping, valves, and fittings shall be maintained in a leak-free (as defined by Rule 4623) condition. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects the VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. When storing liquids with a true vapor pressure greater than 0.5 psia, a reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor loss prevention system capable of collecting the VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Any component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 22201] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
14. VOC fugitive emissions from the components in gas service on tank and tank vapor control system, including vapor control system trunk line, shall not exceed 40.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall maintain with the permit accurate fugitive component counts for tank and tank vapor control system, including vapor control system trunk line, according to Table 2-4 (Oil and Gas Production Operations Average Emission Factors) of USEPA's protocol for Equipment Emission Estimates - EPA -453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1115-6 **EXPIRATION DATE:** 05/31/2022

SECTION: SE 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,900 GALLON INDUCED STATIC FLOTATION CELL VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-704 (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All piping valves and fittings shall be constructed and maintained in a gas tight condition. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 10.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The true vapor pressure (TVP) of any liquid placed, stored or held in the tank shall be less than 0.5 psia at storage temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. This permit authorizes induced static flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

15. Permittee shall conduct induced static flotation unit cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Induced static flotation unit may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

17. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 2080 and 4623] Federally Enforceable Through Title V Permit

18. Prior to opening the induced static flotation unit to allow cleaning the following procedures must be followed: Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the induced static flotation unit to the maximum extent feasible prior to opening the induced static flotation unit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Prior to opening the induced static flotation unit to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the induced static flotation unit has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the induced static flotation unit liquid capacity is displaced, 3) vent the induced static flotation unit to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the induced static flotation unit to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V = induced static flotation unit volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations . [District Rule 2080] Federally Enforceable Through Title V Permit
20. The induced static flotation unit shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Prior to reintroducing crude oil/water to the induced static flotation unit, the induced static flotation unit shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the induced static flotation unit. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Within 48 hours after refilling the induced static flotation unit with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of each period of cleaning and maintenance when the induced static flotation unit is disconnected or isolated from the vapor control system. Records shall include the date that induced static flotation unit cleaning was initiated, the date induced static flotation unit cleaning was completed, the method of induced static flotation unit cleaning used, and a description of internal and external induced static flotation unit repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1116-4 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
UP TO 106,200 GALLON FWKO D-4008 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1117-4 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
UP TO 106,200 GALLON FWKO D-4009 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1119-4 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
26,000 GALLON INDUCED STATIC FLOTATION CELL D-4505 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 10.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1121-5 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
12,000 GALLON SURGE VESSEL, 12 FEET DIAMETER BY 14 FEET SEAM HEIGHT VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-704 (A/F DEHY)

PERMIT UNIT REQUIREMENTS

1. Vessel and all vessel appurtances shall be maintained leak-free, as defined in Rule 4623, except during periods of vessel cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Any component found to be in non-compliance with the leak-free requirement shall be repaired to a leak-free condition within 15 days of detection. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vessel shall be designed and maintained to vent only to vapor control system listed on permit S-1547-704, except during periods of vessel cleaning, vapor control system maintenance, and power outages. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions from vapor recovery components associated with this vessel shall not exceed 6.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall maintain an accurate fugitive component count for the vessel and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1122-3 **EXPIRATION DATE:** 05/31/2022

SECTION: SW27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
UP TO 104 HEAVY OIL TEST STATIONS (HOTS), CLOSED PIPING SYSTEM, AND ONE OR MORE PRESSURE VESSEL TEST TANK(S)

PERMIT UNIT REQUIREMENTS

1. Total VOC fugitive emission rate from HOTs equipment shall not exceed 452.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1123-3 **EXPIRATION DATE:** 05/31/2022

SECTION: SW2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
12 FT DIA X 65 FT SHELL LENGTH 55,000 GALLON FREE WATER KNOCKOUT VESSEL VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes FWKO cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Permittee shall conduct FWKO cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
5. FWKO may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Permittee shall notify the District Compliance division at least two(2) days before any tank/vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Prior to opening the FWKO to allow cleaning the following procedures must be followed: Operate PV valve and vapor control system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the FWKO to the maximum extent feasible prior to opening the FWKO. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Prior to opening the FWKO to allow FWKO cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the FWKO has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the FWKO liquid capacity is displaced, 3) vent the FWKO to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the FWKO to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = FWKO volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The FWKO shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

11. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1124-3 **EXPIRATION DATE:** 05/31/2022

SECTION: SW2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
12 FT DIA X 65 FT SHELL LENGTH 55,000 GALLON FREE WATER KNOCKOUT VESSEL VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888 (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 13.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes FWKO cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Permittee shall conduct FWKO cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
5. FWKO may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Permittee shall notify the District Compliance division at least two(2) days before any tank/vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Prior to opening the FWKO to allow cleaning the following procedures must be followed: Operate PV valve and vapor control system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the FWKO to the maximum extent feasible prior to opening the FWKO. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Prior to opening the FWKO to allow FWKO cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the FWKO has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the FWKO liquid capacity is displaced, 3) vent the FWKO to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the FWKO to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = FWKO volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
9. The FWKO shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

11. This unit is subject to the Dehy 2 Vapor Recovery and Inspection Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1127-2 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
11,000 GALLON HYDROCHLORIC ACID STORAGE TANK WITH FUME SCRUBBER - SECTION 2 WATER PLANT

PERMIT UNIT REQUIREMENTS

1. Tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank fume scrubber shall be operated while adding HCl into the storage tank. [District Rule 4102]
3. Scrubber sprays and/or nozzles shall be maintained in optimum working condition. [District Rule 4102]
4. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
5. Fresh scrubber liquid (water) shall be added per manufacturer's recommendations to maintain a scrubbing efficiency of at least 99%. [District Rule 4102]
6. Spent packed water column water shall be disposed of in a manner preventing acid emissions. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1137-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
ONE 150,000 GALLON OILFIELD PRODUCTION SAND BASIN. - (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. Sand basin shall receive liquids and solids only from AERA's Heavy Oil Western Stationary Source. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During the clean out operation, the solids and liquids shall be removed from the sand basin in a timely manner to minimize VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed the following 0.006 lb/sq ft-day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sand basin surface area shall not exceed 2,500 sq.ft. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This sand basin shall not operate as a sump as defined in District Rule 4402. [District Rule 4402, 2.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1138-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
ONE 150,000 GALLON OILFIELD PRODUCTION SAND BASIN. - (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. Sand basin shall receive liquids and solids only from AERA's Heavy Oil Western Stationary Source. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The sand basin shall be covered by a tarp (sun screen) to aid in reducing potential air contaminant emissions except during maintenance and clean out operations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. During the clean out operation, the solids and liquids shall be removed from the sand basin in a timely manner to minimize VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed the following 0.006 lb/sq ft-day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sand basin surface area shall not exceed 2,500 sq.ft. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This sand basin shall not operate as a sump as defined in District Rule 4402. [District Rule 4402, 2.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1141-6 **EXPIRATION DATE:** 05/31/2022

SECTION: 2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
PRODUCED WATER HYDROGEN SULFIDE DEGASSING OPERATION WITH 51,000 GALLON DEGASSING VESSEL AND VAPOR CONTROL SYSTEM INCLUDING COMPRESSOR(S), PUMP(S), KNOCKOUT VESSEL(S), AND FIN-FAN HEAT EXCHANGER(S) (DEHY 2)

PERMIT UNIT REQUIREMENTS

1. While dormant, the operator shall close and lock the control valve for the vapor discharge line, physically blind off the vapor discharge lines, or physically disconnect the vapor discharge line. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal gas sampling of the vessel and vapor control system piping and components shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal gas sampling shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. The gas sampling of the vessel and vapor control system piping and components required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. Periodic gas sampling shall resume according to the quarterly or annual schedule established prior to the unit being designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
8. Vapor from this operation shall only be sent to well vent vapor collection and control system listed in permit S-1547-359. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC content of vessel and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Unless the unit is designated as dormant, operator shall conduct quarterly gas sampling of vessel and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1142-8 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100A) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1; 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 22.2 lb/day or 5840 lb/yr or CO: 37.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The operator shall demonstrate compliance with this unit's sulfur compound exhaust concentration limit(s) using one of the following: fire the unit only on PUC or FERC regulated natural gas, test the sulfur content of each fuel source, 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 Rules 2520, 9.4.2, 4301, 5.2 and Rule 480] Federally Enforceable Through Title V Permit
9. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1143-7 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100B) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1; 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 22.2 lb/day or 5840 lb/yr, or CO: 37.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1144-7 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100C) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing to maintain ongoing compliance documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 5.1; 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 22.2 lb/day or 5840 lb/yr or CO: 37.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1145-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100D) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing pursuant to conditions 30, 34, 36, 37, 38 and 39 documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1146-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100E) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing pursuant to conditions 30, 34, 36, 37, 38 and 39 documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1147-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100F) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing pursuant to conditions 30, 34, 36, 37, 38 and 39 documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1148-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100G) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1149-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100H) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1150-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100J) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1151-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85.0 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR (SG100K) WITH NORTH AMERICAN 4231-85-GLE BURNER AND FGR APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: NE/4 Section 33, T28S, R21E; SE/4 Section 33, T28S, R21E and SE/4 Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits unless source testing documents compliance without utilizing the flue gas recirculation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 0.75 grains S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup, shutdown, and refractory curing, shall not exceed any of the following: PM10: 0.0076 lb/MMBtu, VOC: 0.0055 lb/MMBtu, NOx (as NO2): 7 ppmv @ 3% O2, or CO: 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 15.5 lb/day, SOx (as SO2): 4.4 lb/day, VOC: 11.2 lb/day, NOx (as NO2): 17.3 lb/day or CO: 37.7 lb/day. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 730 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1152-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
51,000 GALLON FREE WATER KNOCKOUT VESSEL D-101B CONNECTED TO VAPOR CONTROL LISTED IN S-1154-854

PERMIT UNIT REQUIREMENTS

1. FWKO shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from FWKO and a VOC control device. The vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained in a gas tight condition. [District Rule 2201] Federally Enforceable Through Title V Permit
2. FWKO shall be designed and maintained to vent only to vapor control system S-1547-854. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emission rate from components in gas and light crude oil service associated with this emission unit shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any FWKO gauging or sampling device shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This permit authorizes FWKO cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Permittee shall conduct FWKO cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
8. FWKO may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
9. FWKO cleaning shall not exceed once per calendar quarter and records (time and date of start and completion) of such cleaning shall be maintained and available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Permittee shall notify the District Compliance division at least 72 hours before FWKO cleaning and vapor control system disconnection. [District Rules 2080 and 4623] Federally Enforceable Through Title V Permit
11. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
12. This unit is subject to the Lost Hills 2 Dehy Inspection Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1159-5 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
2000 BBL (84,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK, LACT TANK (F-108) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-854 - LOST HILLS 2 DEHYDRATION FACILITY

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions from this tank shall not exceed 108.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Tank may vent to vapor control system listed on PTO S-1547-854. Tank may be isolated from the vapor control system at any time (e.g. tank cleaning, maintenance, operational demands, etc.). [District Rule 2201] Federally Enforceable Through Title V Permit
6. When tank is connected to vapor control system, operator shall implement the inspection and maintenance program described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this vessel shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane): a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given vessel is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1] Federally Enforceable Through Title V Permit
14. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. This unit is subject to the Lost Hills 2 Dehy Testing Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1160-5 **EXPIRATION DATE:** 05/31/2022

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
2000 BBL (84,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK, LACT TANK (F-109) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1547-854 - LOST HILLS 2 DEHYDRATION FACILITY

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions from this tank shall not exceed 108.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Tank may vent to vapor control system listed on PTO S-1547-854. Tank may be isolated from the vapor control system at any time (e.g. tank cleaning, maintenance, operational demands, etc.). [District Rule 2201] Federally Enforceable Through Title V Permit
6. When tank is connected to vapor control system, operator shall implement the inspection and maintenance program described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this vessel shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane): a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given vessel is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.1] Federally Enforceable Through Title V Permit
14. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP and API gravity. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. This unit is subject to the Lost Hills 2 Dehy Testing Conditions on Permit S-1547-854. Deviations from a standard condition shall be reported under the applicable condition in S-1547-854. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1162-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME GLE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
11. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Emissions from the natural gas-fired unit shall not exceed any of the following limits: NOx: 5 ppmvd @ 3% O2 or 0.0061 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
15. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
16. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
19. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1163-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME GLE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
11. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Emissions from the natural gas-fired unit shall not exceed any of the following limits: NOx: 5 ppmvd @ 3% O2 or 0.0061 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
15. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
16. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
19. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1164-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME GLE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
11. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Emissions from the natural gas-fired unit shall not exceed any of the following limits: NOx: 5 ppmvd @ 3% O2 or 0.0061 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit

16. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit

17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit

18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit

19. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1173-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME G-LE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown, initial commissioning and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1174-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA FLAME G-LE ULTRA LOW NOX BURNER APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1175-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME G-LE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resource Code 21000-21177: California Envir] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resource Code 21000-21177: California Envir] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1176-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME G-LE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown, initial commissioning and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1177-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME LEX ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177:California Envir] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177:California Envir] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1178-5 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME LEX ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177:California Envir] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177:California Envir] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown, initial commissioning and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1180-4 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA FLAME GLE ULTRA LOW NOX BURNER, APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. During any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is approved for operation at the following locations: SW/4 of Section 20, NE/4 & SE/4 of Section 29, and NW/4, SW/4 & SE/4 of Section 28, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
5. This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The total PM10 emissions from Units S-1547-1162-0 though '-1180-0 shall not exceed 124 lb/day at location #2038 in the SW/4 of Section 20, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
10. The total PM10 emissions from Units S-1547-1162 through '-1180-0 shall not exceed 168 lb/day at location #2972 in the SE/4 of Section 29, T28S, R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of daily PM10 emissions from Units S-1547-1162-0 through S-1547-1180-0 at locations #2038 and #2972. [District Rule 4102] Federally Enforceable Through Title V Permit
12. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup, shutdown, initial commissioning and refractory curing, shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.0076 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Annual quantity of natural gas fuel burned in this steam generator shall not exceed 672,000 MMBTU/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
16. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
17. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
18. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
19. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
20. Permittee shall maintain annual records of the quantity of fuel combusted by the steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1181-9 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:
14,736.5 GALLON HYDROCHLORIC ACID STORAGE TANK VENTED TO THE FUME SCRUBBER SHARED WITH S-1547-1331 (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. This tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank shall vent all HCl fumes to operational fume scrubber at all times during filling. [District Rule 4102]
3. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
4. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacture's listed scrubbing efficiency. [District Rule 4102]
5. Spent water from the scrubber shall be disposed of in a manner preventing acid emissions. [District Rule 4102]
6. Permittee personnel shall be present during all acid deliveries to verify storage tank has sufficient outage to receive the volume of acid to be delivered and that all acid unloading connections are secured. [District Rule 4102]
7. Deliveries shall not exceed 15,000 gallons of HCl per day and 1,800,000 gallons of HCl per year. [District Rule 4102]
8. Permittee shall keep records of maintenance inspections, acid delivery dates and volumes delivered. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1202-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 1 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
560 BBL FWKO VESSEL (V-102) CONNECTED TO TEOR WELL VENT VAPOR COLLECTION SYSTEM S-1547-707 (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-707. [District Rule 2080] Federally Enforceable Through Title V Permit
2. All piping, fittings, and valves shall be constructed and maintained in a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Vessel covers, inspection hatches, etc. shall be maintained in a leak-free condition except during vessel cleaning, repair, or maintenance. [District Rule 2080] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2080] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2080] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within 30 working days after the date on which the component is repaired. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule2080] Federally Enforceable Through Title V Permit
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2080] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2080] Federally Enforceable Through Title V Permit
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1203-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 1 **TOWNSHIP:** 11N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
700 BBL FWKO VESSEL (V-103) CONNECTED TO TEOR WELL VENT VAPOR COLLECTION SYSTEM S-1547-707 (D&E SANDS)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-707. [District Rule 2080] Federally Enforceable Through Title V Permit
2. All piping, fittings, and valves shall be constructed and maintained in a leak-free condition. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Vessel covers, inspection hatches, etc. shall be maintained in a leak-free condition except during vessel cleaning, repair, or maintenance. [District Rule 2080] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2080] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2080] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2080] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within 30 working days after the date on which the component is repaired. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule2080] Federally Enforceable Through Title V Permit
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2080] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2080] Federally Enforceable Through Title V Permit
12. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2080] Federally Enforceable Through Title V Permit
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1204-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,650 BBL FWKO VESSEL (V-104) CONNECTED TO TANK VAPOR CONTROL SYSTEM S-1547-442 (LOCKWOOD)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Inspection and Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

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Air Pollution Control District

PERMIT UNIT: S-1547-1205-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
134 BBL INLET SEPARATOR VESSEL (V-105) CONNECTED TO TANK VAPOR CONTROL SYSTEM S-1547-442 (LOCKWOOD)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-442. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the Lockwood Dehy Inspection and Cleaning Conditions on Permit S-1547-442 Deviations from a standard condition shall be reported under the applicable condition in S-1547-442. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1206-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
2,040 BBL FWKO VESSEL (D-101A) CONNECTED TO TANK VAPOR CONTROL SYSTEM S-1547-843 (MOCO)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1207-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
2,040 BBL FWKO VESSEL (D-101B) CONNECTED TO TANK VAPOR COLLECTION SYSTEM S-1547-843 (MOCO)

PERMIT UNIT REQUIREMENTS

1. The pressure vessel shall vent only to the vapor control system listed on S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit is subject to the MOCO Vapor Recovery, Inspection, Testing, and Cleaning Conditions on Permit S-1547-843. Deviations from a standard condition shall be reported under the applicable condition in S-1547-843. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1209-7 **EXPIRATION DATE:** 05/31/2022

SECTION: NW 36 **TOWNSHIP:** 27S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
UP TO FIFTY THERMALLY ENHANCED OIL RECOVERY WELLS WITH BEAM-DRIVEN CASING GAS COMPRESSORS OPERATED WITH PRODUCED GAS ROUTED TO PRODUCED FLUID LINE (BELRIDGE OIL FIELD)

PERMIT UNIT REQUIREMENTS

1. Beam-driven casing gas compressors authorized by this PTO shall only be located in NW Section 36 and Section 25 in T27S, R20E and Sections 7, 18, 20, 28, 29, 33, 34 and 35 in T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Produced gas shall be routed to produced fluid line prior to entering crude oil storage tanks. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
4. All produced fluids (gas. water, oil) from TEOR wells shall be sent to tanks served by a vapor control system with 99% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall implement an I&M program consistent with all applicable requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
6. The VOC content of the casing gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The casing gas from each well shall be sampled for VOC content within 30 days of retrofitting each well with a beam-driven compressor. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall conduct representative VOC quarterly sampling of the well casing gas on 20% of the active wells equipped with beam-driven compressors. If the gas sampled is 10% or less VOC by weight for eight consecutive quarterly samplings, the sampling frequency shall only be required annually. If a test shows noncompliance with the percent VOC requirement, the source must return to quarterly testing until eight consecutive quarters show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
10. The annual inspection requirements of Section 5.8.1 through Section 5.8.5 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less, as determined by the test methods in Section 6.3.5 of Rule 4401. [District Rule 4401 4.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.1 and 5.5.2] Federally Enforceable Through Title V Permit
12. An operator shall be in violation of this rule if any District inspection demonstrates the existence of a component with a major liquid leak, a component with a gas leak greater than 50,000 ppmv, or an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
13. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally Enforceable Through Title V Permit
14. An operator shall be in violation of this rule if any District inspection demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
15. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
16. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401 5.7.2] Federally Enforceable Through Title V Permit
17. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401 5.7.3] Federally Enforceable Through Title V Permit
18. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit
19. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit
20. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401 5.9.3] Federally Enforceable Through Title V Permit
21. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
23. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit
24. The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit
25. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401 5.9.7] Federally Enforceable Through Title V Permit
26. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit
27. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit
28. The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit
29. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit
30. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401 6.1.8] Federally Enforceable Through Title V Permit
31. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401 6.1.11] Federally Enforceable Through Title V Permit
32. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit
33. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit
34. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit
35. An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct an initial TVP testing of the produced fluid in each gauge tank not later than June 14, 2007. Thereafter, an operator shall conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July - September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.10 of Rule 4401. [District Rule 4401 6.2.5] Federally Enforceable Through Title V Permit

37. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401 6.3.1] Federally Enforceable Through Title V Permit

38. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401 6.3.3] Federally Enforceable Through Title V Permit

39. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401 6.3.5] Federally Enforceable Through Title V Permit

40. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4401, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1211-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 4 **TOWNSHIP:** 27S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
TWO HYDRACAT SOLID BED SULFUR TREATMENT VESSELS AND ASSOCIATED AIR BLOWERS, PUMPS, AND PIPING (LOST HILLS ONE LEASE)

PERMIT UNIT REQUIREMENTS

1. Fugitive VOC emissions from this equipment shall not exceed 32.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using U.S. EPA document "EPA Protocol for Equipment Leak Emission Estimate," Table 2-4, "Oil and Gas Production Operations," using average emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All fluids shall be handled only in closed production equipment with vapor control system equipped with a 99% efficient VOC destruction device. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
5. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components subject to the requirements of Rule 4409, but not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
6. For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
7. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit
8. Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit

10. An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit

11. For rule 4409 compliance, a leak from a component is when there is a major liquid leak from the component. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit

12. For rule 4409 compliance, a leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit

13. A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

14. For rule 4409 compliance, when 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

15. For rule 4409 compliance, when 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

16. For rule 4409 compliance, when 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

17. For rule 4409 compliance, when 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

18. For rule 4409 compliance, when compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

19. For rule 4409 compliance, when pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit

21. For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit

22. All accessible operating pumps, compressors, and PRDs, in VOC service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit

23. Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in VOC service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit

24. Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit

25. All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit

26. All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit

27. All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

28. All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

29. All pipes, in VOC service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit

30. The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non- Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit

31. The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit

32. A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit

34. District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit

35. For rule 4409 compliance, the operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of rule 4409. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

36. The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

37. For rule 4409 compliance, the operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

38. For rule 4409 compliance, for each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit

39. For rule 4409 compliance, if a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. For rule 4409 compliance, for any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

41. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit

42. The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit

43. By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

44. For rule 4409 compliance, the operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

45. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit
47. All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit
48. All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit
49. The VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit
50. The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit
51. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit
52. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit
53. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit
54. Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit
55. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1213-1 **EXPIRATION DATE:** 05/31/2022

SECTION: 27 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
15,000 GALLON HYDROCHLORIC ACID STORAGE TANK SERVED BY A FUME SCRUBBER

PERMIT UNIT REQUIREMENTS

1. Tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank shall vent all HCl fumes to operational fume scrubber at all times during filling. [District Rule 4102]
3. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
4. Deliveries shall not exceed 15,000 gallons of hydrochloric acid per day. [District Rule 4102]
5. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacturer's listed scrubbing efficiency. [District Rule 4102]
6. Spent packed water column water shall be disposed of in a manner preventing acid emissions. [District Rule 4102]
7. Permittee shall keep records of maintenance inspections, acid delivery dates and volumes delivered. All records shall be retained for a minimum of five years. Records shall be made available for District inspection upon request. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1214-6 **EXPIRATION DATE:** 05/31/2022

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
4,500 GALLON OILFIELD CHEMICAL STORAGE TANK #1 - DEHY 20

PERMIT UNIT REQUIREMENTS

1. This tank may be operated to store chemicals for the treatment of produced fluids from facilities S-1547 and S-1548. [District Rule 2080] Federally Enforceable Through Title V Permit
2. This tank is approved for operation at the following locations: NW and NE Section 20, SW Section 27 and SE Section 28 of T28S, R21E. [District Rule 4102]
3. Permittee shall notify District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be equipped with an operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
8. This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not to exceed 2.1 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Tank throughput shall not exceed 234,000 gallon per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank throughput shall not exceed 6,500 gallon per day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. VOC emission rate from the tank shall not exceed 2.7 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permit holder shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
17. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of the "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588," dated August 1989. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
18. Operator shall submit the records of TVP testing conducted in accordance with the testing requirements of Rule 4623, 6.2 to the APCO within 45 days after the date of testing. The record shall include the tank identification number, PTO number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of liquid in the tank, inspection log and such records shall be retained on-site for a minimum of five (5) years and made available for APCO upon request, except for certain records that need to be submitted as specified in this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1215-4 **EXPIRATION DATE:** 05/31/2022

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
4,400 GALLON OILFIELD CHEMICAL STORAGE TANK #2 - DEHY 20

PERMIT UNIT REQUIREMENTS

1. This tank may be operated to store chemicals for the treatment of produced fluids from facilities S-1547 and S-1548. [District Rule 2080] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
6. This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
8. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not to exceed 2.1 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. Tank throughput shall not exceed 234,000 gallon per year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Tank throughput shall not exceed 6,500 gallon per day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. VOC emission rate from the tank shall not exceed 2.7 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
13. True vapor testing (TVP) testing to demonstrate compliance with Rule 4623 shall be conducted within 60 days of startup, and once every 24 months during summer (July - September) thereafter. [District Rules 1081 and 4623] Federally Enforceable Through Title V Permit
14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit
15. The permit holder shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
16. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of the "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588," dated August 1989. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit
17. In lieu of testing each uncontrolled fixed roof tank, the permit holder may conduct a TVP testing of the organic liquid stored in a representative tank provided the following requirements are met: (1) the selection of representative, uncontrolled fixed roof tanks shall be submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) one uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (as defined in Rule 4623, Section 3.31, Amended 5/19/05); (3) the TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent; and (4) the stored organic liquid in each of the represented tanks is the same and came from the same source. [District Rule 4623, 6.2.1.1] Federally Enforceable Through Title V Permit
18. An operator shall submit the records of TVP testing conducted in accordance with the testing requirements of Rule 4623, 6.2 to the APCO within 45 days after the date of testing. The record shall include the tank identification number, PTO number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of liquid in the tank, inspection log and such records shall be retained on-site for a minimum of five (5) years and made available for APCO upon request, except for certain records that need to be submitted as specified in this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1260-3 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
156.8 BHP PERKINS/CATERPILLAR MODEL 3362/D100 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 2.61 g-NOx/bhp-hr, 1.34 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.15 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
11. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201, 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
14. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. Written records of the engine idling time are not required. Compliance with the idle-time limit shall be demonstrated by establishing a procedure that includes the minimization of engine idling time. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in 40 CFR 63.6625(i) to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1261-1 **EXPIRATION DATE:** 05/31/2022

SECTION: NE 29 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
100 MMBTU/HR NATURAL/PRODUCED GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER (2972 SETTING)

PERMIT UNIT REQUIREMENTS

1. During the initial commissioning period and any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual initial commissioning and refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of the initial commissioning period and all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit may only operate in the NE ¼ of Section 29, Township 28S, and Range 21E. [District Rule 4102] Federally Enforceable Through Title V Permit
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201, 4320 and 4801] Federally Enforceable Through Title V Permit
5. Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.005 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up, shutdown and refractory curing periods shall not exceed any of the following limits: 7,008 lb-NOx/yr, 1,840 lb-SOx/yr, 4,380 lb-PM10/yr, 16,206 lb-CO/yr, and 2,628 lb-VOC/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
8. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
9. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit

11. Steam generator shall be equipped with variable frequency drive electrical motors driving the blower and water pump and a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer) or a manufacturer's overall thermal efficiency rating of 88%. [District Rule Public Resources Code 21000-21177: C] Federally Enforceable Through Title V Permit

12. Permittee shall comply with all California Department of Fish and Wildlife mitigation measures identified in the Biological Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential biological species impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit

13. Permittee shall comply with all Native American Heritage Commission (NAHC) mitigation measures identified in the Cultural Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential cultural, archaeological, and paleontological impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit

14. Permittee shall comply with all Department of Toxic Substances Control (DTSC) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public and environment from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit

15. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit

16. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hydrology and Water Quality discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential water quality impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Envi] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator General Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1331-2 **EXPIRATION DATE:** 05/31/2022

SECTION: 35 **TOWNSHIP:** 12N **RANGE:** 23W

EQUIPMENT DESCRIPTION:
20,000 GALLON HYDROCHLORIC ACID STORAGE TANK WITH FUME SCRUBBER SHARED WITH S-1547-1181 (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. This tank shall store only hydrochloric acid (HCl). [District Rule 4102]
2. Tank shall vent all HCl fumes to operational fume scrubber at all times during filling. [District Rule 4102]
3. Scrubber shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4102]
4. Fresh scrubber liquid (water) shall be added as necessary to maintain at least manufacture's listed scrubbing efficiency. [District Rule 4102]
5. Spent water from the scrubber shall be disposed of in a manner preventing acid emissions. [District Rule 4102]
6. Permittee personnel shall be present during all acid deliveries to verify storage tank has sufficient outage to receive the volume of acid to be delivered and that all acid unloading connections are secured. [District Rule 4102]
7. Deliveries shall not exceed 15,000 gallons of HCl per day and 1,800,000 gallons of HCl per year. [District Rule 4102]
8. Permittee shall keep records of maintenance inspections, acid delivery dates and volumes delivered. [District Rule 4102]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1333-2 **EXPIRATION DATE:** 05/31/2022

SECTION: NE 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (#105, GEN SITE 3363) WITH NORTH AMERICAN ULTRA-LOX NOX MAGNA-FLAME GLE BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Natural gas fuel sulfur content shall not exceed 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup and shutdown shall not exceed any of the following PM10: 0.007 lb/MMBtu, VOC: 0.007 lb/MMBtu, NOx (as NO2): 0.0061 lb/MMBtu or 5 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1334-2 **EXPIRATION DATE:** 05/31/2022

SECTION: NE 33 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (#107, GEN SITE 3363) WITH NORTH AMERICAN ULTRA-LOX NOX MAGNA-FLAME GLE BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Natural gas fuel sulfur content shall not exceed 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup, shutdown, initial commissioning and refractory curing, shall not exceed any of the following PM10: 0.007 lb/MMBtu, VOC: 0.007 lb/MMBtu, NOx (as NO2): 0.0061 lb/MMBtu or 5 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1335-2 **EXPIRATION DATE:** 05/31/2022

SECTION: VAR **TOWNSHIP:** VAR **RANGE:** VAR

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (#121, GEN SITE 3363) WITH NORTH AMERICAN ULTRA-LOX NOX MAGNA-FLAME GLE BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Approved locations for steam generator are: SW/4 SEC 20, T28S, R21E, SE/4 SEC 28, T28S, R21E, NE/4 SEC 29, T28S, R21E, NE/4 SEC 33, T28S, R21E, SE/4 SEC 33, T28S, R21E, and SE/4 SEC 34 , T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Natural gas fuel sulfur content shall not exceed 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.008 lb/MMBtu, VOC: 0.006 lb/MMBtu, NOx (as NO2): 0.0061 lb/MMBtu or 5 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 3.2 lb/day, VOC: 9.0 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 52.5 lb/day or 16,425 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1336-2 **EXPIRATION DATE:** 05/31/2022

SECTION: VAR **TOWNSHIP:** VAR **RANGE:** VAR

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR (#158, GEN SITE 3363) WITH NORTH AMERICAN ULTRA-LOX NOX MAGNA-FLAME GLE BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Approved locations for steam generator are: SW/4 SEC 20, T28S, R21E, SE/4 SEC 28, T28S, R21E, NE/4 SEC 29, T28S, R21E, NE/4 SEC 33, T28S, R21E, SE/4 SEC 33, T28S, R21E, and SE/4 SEC 34 , T28S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least 48 hours prior to transfer between approved locations. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emission rates, except during startup and shutdown, shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.0061 lb/MMBtu or 5 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1337-1 **EXPIRATION DATE:** 05/31/2022

SECTION: 20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
6500 GALLON CHEMICAL STORAGE TANK WITH P/V VALVE AND LIQUID LOADOUT OPERATION (ALSO PERMITTED AS S-1548-621)

PERMIT UNIT REQUIREMENTS

1. Tank shall be equipped with pressure/vacuum valve set to within 10 percent of the maximum working pressure of the tank. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
2. Tank shall be in a leak-free condition. A Leak-Free condition is defined as a condition without a gas leak or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 (amended May 19, 2005). A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minutes. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Tank throughput shall not exceed 6,500 gallons per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Total volume of liquid loaded out shall not exceed 2,500 gallon per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.6 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Liquids loaded out shall have a true vapor pressure (TVP) of less than 0.6 psia [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total number of disconnects from unloading and load-out operations shall not exceed 8 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC emissions from liquid loadout and excess liquid drainage shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. MSDS or chemical laboratory results documenting tvp of liquid stored and loaded out shall be maintained on-site and made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. Permittee shall maintain monthly records of average daily throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature and TVP. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Permittee shall keep accurate daily records of TVP, types of liquids loaded out, liquid loadout temperature, gallons per day of liquid loaded out, and number of disconnects for loading and unloading. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Records shall be maintained on site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 4623 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1338-1 **EXPIRATION DATE:** 05/31/2022

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
6,500 GALLON OILFIELD CHEMICAL STORAGE TANK #3 - DEHY 20 (ALSO PERMITTED AS S-1548-622-0)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. Tank shall be equipped with an operational temperature indicator. [District Rule 2201]
3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
4. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623]
5. This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623]
6. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623]
7. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]
8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not to exceed 2.7 psia under all storage conditions. [District Rules 2201 and 4623]
9. Tank throughput shall not exceed 234,000 gallon per year. [District Rule 2201]
10. Tank throughput shall not exceed 6,500 gallon per day. [District Rule 2201]
11. VOC emission rate from the tank shall not exceed 2.7 lb/day [District Rule 2201]
12. True vapor testing (TVP) testing to demonstrate compliance with Rule 4623 shall be conducted within 60 days of startup, and once every 24 months during summer (July - September) thereafter. [District Rules 1081 and 4623]
13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623, 6.2.1.2]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. The permit holder shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2]

15. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of the "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588," dated August 1989. [District Rule 4623, 6.4.3]

16. In lieu of testing each uncontrolled fixed roof tank, the permit holder may conduct a TVP testing of the organic liquid stored in a representative tank provided the following requirements are met: (1) the selection of representative, uncontrolled fixed roof tanks shall be submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) one uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (as defined in Rule 4623, Section 3.31, Amended 5/19/05); (3) the TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent; and (4) the stored organic liquid in each of the represented tanks is the same and came from the same source. [District Rule 4623, 6.2.1.1]

17. An operator shall submit the records of TVP testing conducted in accordance with the testing requirements of Rule 4623, 6.2 to the APCO within 45 days after the date of testing. The record shall include the tank identification number, PTO number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]

18. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of liquid in the tank, inspection log and such records shall be retained on-site for a minimum of five (5) years and made available for APCO upon request, except for certain records that need to be submitted as specified in this permit. [District Rules 2201 and 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1339-1 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH COEN QLN LOW NOX BURNER WITH FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
2. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
7. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306,] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit

14. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1340-1 **EXPIRATION DATE:** 05/31/2022

SECTION: 26 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #44 WITH COEN QLN-ULN 3.2 BURNER

PERMIT UNIT REQUIREMENTS

1. The fuel supply line shall be physically disconnected from this unit when it is dormant. [District Rule 4306] Federally Enforceable Through Title V Permit
2. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070] Federally Enforceable Through Title V Permit
6. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
7. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Maximum annual heat input of the unit shall not exceed 438,000 MMBtu per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas/vapor recovery gas combusted in the unit shall be utilized and maintained. Use of an alternate system consisting of calibrated orifice plates, transmitters, and a programmable logic controller (PLC) may be used to meet this requirement. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Emission rates shall not exceed either of the following: PM10: 0.080 lb/MMBtu or SOx (as SO2): 0.361 lb/MMBtu. [District Rules 2201, 2520, 4201, and 4301] Federally Enforceable Through Title V Permit

14. Emission rates, except during startup and shutdown and refractory curing, shall not exceed the following: NOx (as NO2): 15 ppmv @ 3% O2, VOC: 0.007 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4] Federally Enforceable Through Title V Permit

15. 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

16. This unit is fired only on gaseous fuel and has no provisions of firing on oil or coal. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator General Conditions, Steam Generator Fuel Monitoring Conditions, Source Testing Conditions, and Periodic Monitoring Conditions on the facility wide permit S-1547-0. Deviations from a standard condition shall be reported under the applicable condition in S-1547-0. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1345-2 **EXPIRATION DATE:** 05/31/2022

SECTION: SW02 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
25,800 GALLON INDUCED STATIC FLOTATION CELL D-4506 VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1547-888

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 16.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using oil & gas production operations average emission factors from Table 2-4 of the U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit is subject to the Dehy 2 Vapor Recovery, Inspection, and Cleaning Conditions on Permit S-1547-888. Deviations from a standard condition shall be reported under the applicable condition in S-1547-888. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1547-1347-1 **EXPIRATION DATE:** 05/31/2022

EQUIPMENT DESCRIPTION:
HYDROGEN SULFIDE (H2S) SCAVENGER CHEMICAL STORAGE AND INJECTION OPERATION APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE HEAVY OIL WESTERN STATIONARY SOURCE UTILIZING UP TO 5 CHEMICAL STORAGE TANKS (CAPACITY OF 500 GALLONS OR LESS) EACH EQUIPPED WITH A CATCH BASIN AND ASSOCIATED COMPONENTS INCLUDING LIQUID TRANSFER PUMP(S), VALVES, FLANGES, THREADED CONNECTIONS, FLEXIBLE PIPING, AND STINGER-TYPE INJECTION FITTINGS ON PRODUCED GAS PIPELINES (ALSO PERMITTED AS S-1548-451)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee shall notify the SJVUAPCD of each location at which an H2S scavenger chemical storage and injection operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Chemical storage and injection operations shall not be located within 1000 feet of a school. [District Rule 4102]
4. Each chemical storage tank shall have a maximum rated capacity of 500 gallons or less and up to eight injection fittings. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permit exempt tanks with a capacity of 250 gallons or less where the actual storage temperature does not exceed 150 deg F may be used to store H2S scavenger chemical. [District Rule 2020] Federally Enforceable Through Title V Permit
6. The maximum throughput of each chemical storage tank shall not exceed 200 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. True vapor pressure of materials stored in each chemical tank shall not exceed 3.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total VOC emissions from all H2S scavenger injection equipment shall not exceed 7.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. On a monthly basis, to determine compliance with daily throughput limits, permittee shall maintain accurate records of average daily throughput for each tank based on purchase records. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate fugitive component counts and resultant emissions calculated using Table 2-4 of U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Accurate records of the dates and amounts of chemical deliveries for each chemical injection site and fugitive component counts shall be retained and made available for District inspection upon request for a period of 5 years. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Operator shall keep records of the true vapor pressure of the chemical stored in the tank. These records shall include a laboratory analysis for TVP according to the methods described in District Rule 4623, Section 6.4 (Amended 5/19/05), MSDS which lists the true vapor pressure, or environmental data sheet which lists the true vapor pressure. Such records shall be made readily available for District inspection upon request for a period of 5 years. [District Rule 4623] Federally Enforceable Through Title V Permit

13. Injection of scavenging chemicals shall not result in an increase in air contaminant or odorous emissions at downstream production handling facilities or wastewater separators, containers, loadouts, or disposal sites. [District Rule 2010] Federally Enforceable Through Title V Permit

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-1-2 **EXPIRATION DATE:** 09/15/2017

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
4.8 MMBTU/HR HOTCO MODEL HEATER TREATER S/N NATIONAL HT V303 NATURAL GAS-FIRED PROCESS HEATER WITH TWO 2.4 MMBTU/HR MAXON MODEL XPO 2 PB LOW NOX BURNERS

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
5. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
6. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
7. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-1-2 : 06/01/2017 -- GOMEZD : Joint Inspection NOT Required

8. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
9. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after issuance of this PEER or installation, whichever is later. [District Rule 4307]
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
15. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
16. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
17. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-2-1 **EXPIRATION DATE:** 09/15/2017

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

LOCATION DESCRIPTION: NATIONAL LEASE

EQUIPMENT DESCRIPTION:
2.8 MMBTU/HR TRICO SUPERIOR S/N X-3995 NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVES PERMIT UNIT S-1547-667)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
5. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
6. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
7. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

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

8. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
9. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
15. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
16. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
17. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-3-0 **EXPIRATION DATE:** 02/04/2015

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2.63 MMBTU/HR NATIONAL TANK COMPANY NATURAL GAS-FIRED ATMOSPHERIC PROCESS HEATER WITH A NATCO BURNER (SERVES PERMIT UNIT S-1547-664)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
5. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
6. The owner/operator shall maintain records to verify that the required tune-ups have been performed. [District Rule 4307]
7. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
8. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-3-0 : 06/01/2017 -- GOMEZD : Joint Inspection NOT Required

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-4-0 **EXPIRATION DATE:** 06/11/2017

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
4.3 MMBTU/HR NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT BURNER

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
5. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
6. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
7. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-4-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
9. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
15. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
16. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
17. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-5-0 **EXPIRATION DATE:** 06/11/2017

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: 19 **TOWNSHIP:** 26S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
2.7 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER WITH A MAXON MODEL M-PAKT BURNER (SERVES PERMIT S-1547-991)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
5. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
6. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
7. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-5-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
9. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
15. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
16. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
17. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-8-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
4.2 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVING PERMIT S-1547-994)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-8-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-9-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5.0 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A JOHN ZINK MODEL SZ12.2-G-50 LOW NOX BURNER (SERVING PERMIT S-1547-995)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-9-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-10-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5.0 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVING PERMIT S-1547-998)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-10-0 : 06/01/2017 -- GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-11-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:
5.0 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVING PERMIT S-1547-999)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

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

9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-12-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5.0 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVING PERMIT S-1547-1000)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-12-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-13-0 **EXPIRATION DATE:** 01/22/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NW14 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5.0 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (SERVING PERMIT S-1547-1001)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-13-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-14-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
5 MMBTU/HR CE NATCO NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (LOCKWOOD HT V-201)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-14-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-15-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
4.2 MMBTU/HR CE NATCO NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (LOCKWOOD HT V-202)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-15-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-16-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW16 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
5 MMBTU/HR CE NATCO NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (LOCKWOOD HT V-203)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-16-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-17-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO HT D-201A)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-17-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-18-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO HT D-201B)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-18-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-19-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO HT D-201C)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-19-0 : 06/01/2017 -- GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-20-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO HT D-201D)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-20-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-21-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO UNIT D-201E)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-21-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]

11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]

13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]

14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]

15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]

16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]

17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]

18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]

19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-22-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING MODEL 5 NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MOCO HT D-201F)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-22-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits in this rule. [District Rule 4307]

10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]

11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to test. [District Rule 1081]

12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]

13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]

14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]

15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]

16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]

17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]

18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]

19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-23-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: NE35 **TOWNSHIP:** 12N **RANGE:** 24W

EQUIPMENT DESCRIPTION:
5 MMBTU/HR KBS MANUFACTURING NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (MODEL NO. MPAKT-201G)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-23-0 : 06/01/2017 -- GOMEZD : Joint Inspection Required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]

11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]

13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]

14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]

15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]

16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]

17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]

18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]

19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1547-24-0 **EXPIRATION DATE:** 05/08/2019

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: 35 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
4.2 MMBTU/HR HYDROTEK NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL M-PAKT LOW NOX BURNER (NATIONAL HT V-3[illegible])

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emission shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]

CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

S-1547-24-0 : 06/01/2017 – GOMEZD : Joint Inspection NOT required

8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than the applicable full compliance date for the unit. [District Rule 4307]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]