

July 31, 2023

Mr. Gregory Clark  
Lodi Gas Storage LLC  
PO Box 230  
Acampo, CA 95220

**Re: Notice of Final Action - Title V Permit Renewal**  
**Facility Number: N-4238**  
**Project Number: N-1213877**

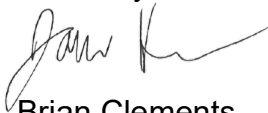
Dear Mr. Clark:

The District has issued the Final Renewed Title V Permit for Lodi Gas Storage LLC (see enclosure). The preliminary decision for this project was made on June 7, 2023. No comments were received following the District's preliminary decision on this project.

The public notice for issuance of the Final Title V Permit will be posted on the District's website ([www.valleyair.org](http://www.valleyair.org)).

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,



Brian Clements  
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email  
cc: Gerardo Rios, EPA (w/enclosure) via EPS

**Samir Sheikh**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585

# Permit to Operate

**FACILITY:** N-4238

**EXPIRATION DATE:** 06/30/2027

**LEGAL OWNER OR OPERATOR:** LODI GAS STORAGE LLC  
**MAILING ADDRESS:** PO BOX 230  
ACAMPO, CA 95220

**FACILITY LOCATION:** 23265 N STATE ROUTE 99  
ACAMPO, CA 95220

**FACILITY DESCRIPTION:** NATURAL GAS TRANSMISSION

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.

**Samir Sheikh**  
Executive Director / APCO

**Brian Clements**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

**FACILITY:** N-4238-0-3

**EXPIRATION DATE:** 06/30/2027

## FACILITY-WIDE REQUIREMENTS

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1. 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 and San Joaquin County Rule 110] Federally Enforceable Through Title V Permit
2. 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 and San Joaquin County Rule 110] Federally Enforceable Through Title V Permit
3. 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
4. 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 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. 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 and 9.13.1] Federally Enforceable Through Title V Permit
6. 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
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring 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
9. 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: LODI GAS STORAGE LLC  
Location: 23265 N STATE ROUTE 99, ACAMPO, CA 95220  
N-4238-0-3 : Jul 31 2023 9:58AM -- ROBINSON

10. 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
11. 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 section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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, 9.13.2.1] Federally Enforceable Through Title V Permit
19. 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
20. 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
21. 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
22. 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 (02/17/05). 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 and San Joaquin County Rule 401] Federally Enforceable Through Title V Permit

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

23. No person shall manufacture, blend, repackage, supply, market, sell, solicit or apply any architectural coating or colorant with a VOC content in excess of the applicable limits specified in Table 1 (Coatings) and Table 2 (Colorants) of District Rule 4601 (4/16/20), unless exempted under section 4.0 of District Rule 4601 (Amended 4/16/20) [District Rule 4601] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (4/16/20). [District Rule 4601] Federally Enforceable Through Title V Permit
26. 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, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. 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
28. 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
29. 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
31. 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
32. 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
33. 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 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 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
35. 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

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

36. 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
37. 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
38. 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 permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (San Joaquin County), Rule 110 (San Joaquin County) and Rule 202 (San Joaquin County). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD 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); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. On September 30, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-1-8

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
2. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The owners or operators 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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
17. The NO<sub>x</sub> emission concentration shall not exceed 11.9 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
20. The SO<sub>x</sub> emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The PM<sub>10</sub> emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



25. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
30. Source testing for NO<sub>x</sub>, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
31. 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
32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
33. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
35. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. 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
38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
45. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-2-10

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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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. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
9. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
20. The owners or operators 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
21. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
22. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
23. The NO<sub>x</sub> emission concentration shall not exceed 11.9 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
24. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
26. The SO<sub>x</sub> emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The PM<sub>10</sub> emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

29. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
32. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
34. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
35. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
36. Source testing for NO<sub>x</sub>, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
37. 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
38. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

39. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
40. 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. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
41. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
42. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
43. 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
44. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
45. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
46. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
47. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
48. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
49. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
50. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
51. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-3-10

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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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. While dormant, normal source testing shall not be required. [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. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The owners or operators 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
20. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
21. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
22. The NO<sub>x</sub> emission concentration shall not exceed 11.9 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
23. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
24. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The SO<sub>x</sub> emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The PM<sub>10</sub> emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



28. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
30. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
31. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
33. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
35. Source testing for NO<sub>x</sub>, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
36. 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
37. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

38. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
39. 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. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
41. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
42. 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
43. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
46. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
48. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
50. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-4-8

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
2. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The owners or operators 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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
17. The NO<sub>x</sub> emission concentration shall not exceed 11.9 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
20. The SO<sub>x</sub> emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The PM<sub>10</sub> emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
30. Source testing for NO<sub>x</sub>, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
31. 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
32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
33. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
35. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. 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
38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
45. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-5-6

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
8. The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The emission control system shall be equipped with a liquid knock-out system to condense any condensable vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
10. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
11. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
12. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
20. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
21. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
22. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
23. 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
24. 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
25. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
26. 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 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit
29. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit
30. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



31. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
32. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
33. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
34. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-6-6

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
8. The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The emission control system shall be equipped with a liquid knock-out system to condense any condensable vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
10. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
11. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
12. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
20. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
21. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
22. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
23. 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
24. 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
25. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
26. 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 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit
29. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit
30. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

31. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
32. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
33. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
34. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-7-4

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

1,508 BHP WAUKESHA MODEL VHP7100GSI RICH BURN NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR. THE ENGINE IS SERVED BY A 3-WAY CATALYTIC CONVERTER

## PERMIT UNIT REQUIREMENTS

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1. The exhaust stack height shall be at least 25 feet above ground level. [District Rule 4102]
2. 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
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. 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
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
7. Only PUC-quality natural gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from this IC engine shall not exceed any of the following limits: 1.0 g-NOx/bhp-hr; 10 g-CO/bhp-hr; 0.1 g-VOC/bhp-hr; 0.1 g-PM10/bhp-hr; or 0.0066 g-SOx/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [District Rules 2201, 4701, and 4702, and 40 CFR Part 63 Subpart ZZZZ] 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 be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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
13. The permittee shall maintain monthly records of emergency and non-emergency operation and of the type of fuel used. 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 4701 and 4702] Federally Enforceable Through Title V Permit
14. 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 4701 and 4702] Federally Enforceable Through Title V Permit
15. The permittee must collect and submit an annual report including location, dates and times of operation if the engine operates for more than 15 hours and up to 100 hours per year for emergency demand response. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
20. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-8-3

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

REPAIR AND MAINTENANCE NATURAL GAS VENTING OPERATIONS SERVED BY A 1,250 MMBTU/HR FLARE WITH ONE KALDAIR MODEL I-12-H-VS TIP

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
3. The maintenance flare (N-4238-8) and the emergency flare (N-4238-9) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
4. The quantity of natural gas burned by this flare shall not exceed 120,000 scf during any one hour while other fuel burning equipment is operating. [District Rule 4102]
5. The quantity of natural gas burned by this flare shall not exceed 350,000 scf during any one hour while no other fuel burning equipment is operating. [District Rule 4102]
6. The quantity of natural gas burned by this flare shall not exceed 371,645 scf during any one day and shall not exceed 624,175 scf during any one calendar quarter. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
7. The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311 and 40 CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
14. A pilot flame shall be present at all times that combustible gases are being vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
17. Flaring is prohibited unless it is consistent with an approved Flare minimization Plan (FMP). The FMP shall be updated at least once every 5 years. [District Rule 4311] Federally Enforceable Through Title V Permit
18. An updated FMP shall be submitted by the operator pursuant to section 6.5 of Rule 4311 (12/17/20) addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if: 1) The equipment change would require an Authority to Construct (ATC) and would impact the emissions from the flare, and 2) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. [District Rule 4311] Federally Enforceable Through Title V Permit
19. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential, the operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311] Federally Enforceable Through Title V Permit
20. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
21. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
22. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
23. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
24. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
25. Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
26. If flares (N-4238-8-3 and -9-3) at this site shares a common header, a sample from the header shall be deemed representative of vent gas composition for all flares served by the header. [District Rule 4311] Federally Enforceable Through Title V Permit
27. Vent gas flow shall be determined using one or more of the following methods or by any alternative method approved by the District, ARB and EPA: (1) EPA Method 1 and 2; (2) a verification method recommended by the manufacturer of the flow monitoring equipment installed; (3) tracer gas dilution or velocity; or (4) other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
28. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



29. Heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use 1,000 Btu/scf as default heating value. [District Rule 4311] Federally Enforceable Through Title V Permit
30. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311] Federally Enforceable Through Title V Permit
31. The following records shall be kept: (1) a copy of the approved Flare Minimization Plan; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring records ;(6) records of inoperation of the flare monitoring systems. [District Rule 4311] Federally Enforceable Through Title V Permit
32. Records of the hourly, daily, quarterly and annual fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
33. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-4238-9-3

**EXPIRATION DATE:** 06/30/2027

**SECTION:** 13 **TOWNSHIP:** 4N **RANGE:** 6E

**EQUIPMENT DESCRIPTION:**

EMERGENCY GAS VENTING OPERATION SERVED BY A 5,000 MMBTU/HR FLARE WITH FOUR KALDAIR MODEL I-12-H-VS TIPS

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
3. The emergency flare (N-4238-9) and the maintenance flare (N-4238-8) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
4. The flare shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
5. The quantity of natural gas burned for testing and maintenance purposes shall not exceed 120,000 scf during any one hour. [District Rule 4102]
6. The quantity of natural gas burned shall not exceed 371,645 scf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311 and 40 CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
14. A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
17. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
18. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
19. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
20. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
21. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
22. Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
23. If flares (N-4238-8-3 and -9-3) at this site shares a common header, a sample from the header shall be deemed representative of vent gas composition for all flares served by the header. [District Rule 4311] Federally Enforceable Through Title V Permit
24. Vent gas flow shall be determined using one or more of the following methods or by any alternative method approved by the District, ARB and EPA: (1) EPA Method 1 and 2; (2) a verification method recommended by the manufacturer of the flow monitoring equipment installed; (3) tracer gas dilution or velocity; or (4) other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
25. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311] Federally Enforceable Through Title V Permit
26. Heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use 1,000 Btu/scf as default heating value. [District Rule 4311] Federally Enforceable Through Title V Permit
27. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311] Federally Enforceable Through Title V Permit
28. The following records shall be kept: (1) for emergency operation, the duration of flare operation, amount of fuel burned and the nature of the emergency situation; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring activities ;(6) records of inoperation of the flare monitoring systems. [District Rule 4311] Federally Enforceable Through Title V Permit
29. Records of the hourly and daily fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

30. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

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