



JUN 05 2014

Mr. Gregory Clark
Lodi Gas Storage, LLC
P.O. Box 230
Acampo, CA 95220-0230

**Re: Notice of Minor Title V Permit Modification
District Facility # N-4238
Project # N-1141799**

Dear Mr. Clark:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to modify Permit(s) to Operate (PTOs) N-4238-1-3 through N-4238-4-3 of the facility's current Title V operating permit. Includes an option to utilize an oil analysis program prescribed in 40 CFR 63 Subpart ZZZZ section §63.6625(j) to extend the specified oil change requirement in Table 2d of this subpart for four existing reciprocating internal combustion engines.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V PTO(s) N-4238-1-4 through N-4238-4-4, application, and previous Title V permit. This project will be finalized after the 45-day EPA comment period.

If you have any questions, please contact Mr. Rupj Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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

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

Title V APPLICATION REVIEW

Minor Modification

Date: May 23, 2014
Facility Number: N-4238
Facility Name: Lodi Gas Storage, LLC
Mailing Address: P.O. Box 230
Acampo, CA 95220-0230

Contact Name: Gregory N. Clark
Phone: (209) 368 – 9277 ext. 21

Responsible Official: Robert Russell
Title: VP, Field Operations

Processing Staff: Wai-Man So
Project Number: N-1141799

I. PROPOSAL

Lodi Gas Storage, LLC (hereinafter LGS) has proposed a Title V minor permit modification to modify Permits to Operate (PTOs) N-4238-1-3 through N-4238-4-3, to include an oil analysis option prescribed in 40 CFR 63 Subpart ZZZZ section 63.6625(j).

The purpose of this document is to identify all applicable requirements, determine if the facility will comply with the applicable requirements, and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

This facility is located at 23265 North State Route 99 in Acampo, California.

III. EQUIPMENT DESCRIPTION

N-4238-1-3

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

N-4238-2-3

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

N-4238-3-3

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

N-4238-4-3

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

IV. SCOPE OF EPA AND PUBLIC REVIEW

The proposed project is a Minor Modification to the Title V permit. Therefore, public review is not required.

V. APPLICABLE REQUIREMENTS

District Rule 2520 Federally Mandated Operating Permits (06/21/01)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

LGS is proposing to include an option to utilize an oil analysis program prescribed in 40 CFR 63 Subpart ZZZZ section §63.6625(j) to extend the specified oil change requirement in the Table 2d of the subpart for four existing reciprocating internal combustion engines.

Per current revision of 40 CFR 63 Subpart ZZZZ, Section §63.6625(j) applies to stationary SI engine that is subject to the work, operation or management practices in items 5, 6, 7, 9, or 11 of Table 2d to the subpart.

The engines under PTOs N-4238-1-3 through N-4238-4-3 are subjected to item 8 of Table 2d of Subpart ZZZZ, and are therefore, the oil analysis program option is not applicable.

However, Ms. Melanie King of EPA confirmed that the option to use an oil analysis program to extend the specified oil change requirements in Table 2d of Subpart ZZZZ is also applicable to the engine that is subjected to item 8 of Table 2d of the subpart. See e-mail correspondence in Appendix V of this document for details.

Therefore, the following new condition will be included into each of the proposed modified Title V PTOs N-4238-1-4 through N-4238-4-4:

- Owners and operators of the engine have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning 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. If all of these condemning limits are not 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. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ]

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, the proposed project modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and

5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

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

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

Compliance is expected with this Rule.

APPENDICES

- Appendix I: Proposed Modified Title V Operating Permits No. N-4238-1-4 through N-4238-4-4
Appendix II: Existing Title V Operating Permits No. N-4238-1-3 and N-4238-4-3
Appendix III: Permit Application
Appendix IV: Emissions Change
Appendix V: EPA's E-mail Correspondence

Appendix I

Proposed Modified Title V Operating Permits No. N-4238-1-4
through N-4238-4-4

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-1-4

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE POWERING A COMPRESSOR. THE ENGINE IS SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST.: TO INCLUDE AN OPTION TO UTILIZE AN OIL ANALYSIS PROGRAM PRESCRIBED IN 40 CFR 63 SUBPART ZZZZ SECTION 63.6625(J) TO EXTEND THE SPECIFIED OIL CHANGE REQUIREMENT OF TABLE 2D OF THIS SUBPART.

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 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.

9. Owners and operators of the engine have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning 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. If all of these condemning limits are not 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. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. 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
15. The NO_x emission concentration shall not exceed 11.9 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
18. The SO_x emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The PM₁₀ emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If either the NO_x or CO concentrations corrected to 15% O₂, 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
24. 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
25. 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
26. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
27. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
28. 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
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
31. The following test methods shall be used: NO_x (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. 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
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
36. 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
37. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-2-4

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE POWERING A COMPRESSOR. THE ENGINE IS SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST. TO INCLUDE AN OPTION TO UTILIZE AN OIL ANALYSIS PROGRAM PRESCRIBED IN 40 CFR 63 SUBPART ZZZZ SECTION 63.6625(J) TO EXTEND THE SPECIFIED OIL CHANGE REQUIREMENT OF TABLE 2D OF THIS SUBPART.

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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9. Owners and operators of the engine have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning 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. If all of these condemning limits are not 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. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ]
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. 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
15. The NO_x emission concentration shall not exceed 11.9 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
18. The SO_x emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The PM₁₀ emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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

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

22. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If either the NO_x or CO concentrations corrected to 15% O₂, 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
24. 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
25. 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
26. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
27. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
28. 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
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
31. The following test methods shall be used: NO_x (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. 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
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
36. 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
37. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-3-4

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE POWERING A COMPRESSOR. THE ENGINE IS SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST.: TO INCLUDE AN OPTION TO UTILIZE AN OIL ANALYSIS PROGRAM PRESCRIBED IN 40 CFR 63 SUBPART ZZZZ SECTION 63.6625(J) TO EXTEND THE SPECIFIED OIL CHANGE REQUIREMENT OF TABLE 2D OF THIS SUBPART.

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 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.

9. Owners and operators of the engine have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning 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. If all of these condemning limits are not 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. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ]
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. 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
15. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
18. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If either the NO_x or CO concentrations corrected to 15% O₂, 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
24. 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
25. 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
26. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
27. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
28. 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
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
31. The following test methods shall be used: NO_x (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. 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
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
36. 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
37. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-4-4

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE POWERING A COMPRESSOR. THE ENGINE IS SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST.: TO INCLUDE AN OPTION TO UTILIZE AN OIL ANALYSIS PROGRAM PRESCRIBED IN 40 CFR 63 SUBPART ZZZZ SECTION 63.6625(J) TO EXTEND THE SPECIFIED OIL CHANGE REQUIREMENT OF TABLE 2D OF THIS SUBPART.

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 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.

9. Owners and operators of the engine have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning 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. If all of these condemning limits are not 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. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ]
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. 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
15. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
18. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. If either the NO_x or CO concentrations corrected to 15% O₂, 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
24. 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
25. 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
26. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
27. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
28. 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
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
31. The following test methods shall be used: NO_x (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

32. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. 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
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
36. 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
37. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

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Appendix II

Existing Title V Operating Permits No. N-4238-1-3 through N-4238-4-3

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-1-3

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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 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
14. The NO_x emission concentration shall not exceed 11.9 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
15. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O₂. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The SO_x emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The PM₁₀ emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. If either the NO_x or CO concentrations corrected to 15% O₂, 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
23. 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
24. 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
25. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 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.

26. 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
27. 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
28. 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
29. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. The following test methods shall be used: NO_x (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
31. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
35. 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
36. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. 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 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-4238-2-3

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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 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
14. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
15. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. If either the NOx or CO concentrations corrected to 15% O2, 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
23. 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
24. 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
25. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 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.

26. 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
27. 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
28. 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
29. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. The following test methods shall be used: NO_x (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
31. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
35. 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
36. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. 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 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-4238-3-3

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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 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
14. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
15. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. If either the NOx or CO concentrations corrected to 15% O2, 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
23. 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
24. 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
25. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 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.

26. 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
27. 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
28. 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
29. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. The following test methods shall be used: NO_x (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
31. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
35. 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
36. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. 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 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-4238-4-3

EXPIRATION DATE: 06/30/2017

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

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
3. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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 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
14. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
15. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
16. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
17. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 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. 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. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. If either the NOx or CO concentrations corrected to 15% O2, 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
23. 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
24. 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
25. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 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.

26. 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
27. 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
28. 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
29. 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_x, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
30. The following test methods shall be used: NO_x (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
31. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
33. 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
34. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (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
35. 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
36. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. 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 Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Appendix III

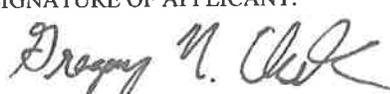
Permit Application

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

[] ADMINISTRATIVE AMENDMENT MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Lodi Gas Storage, LLC (Facility ID No. N-4238)	
2. MAILING ADDRESS: STREET/P.O. BOX: PO Box 230 CITY: Acampo STATE: CA 9-DIGIT ZIP CODE: 95220-0230	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: 23265 N State Route 99 CITY: Acampo ¼ SECTION TOWNSHIP RANGE	INSTALLATION DATE: Existing Facility/Equipment
4. GENERAL NATURE OF BUSINESS: Natural Gas Storage	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Modification of Condition 8 in the following ATCs to allow for the oil analysis option of 40 CFR 63, Subpart ZZZZ: ATC N-4238-1-3 (4,445 BHP Caterpillar Model G3616 Lean Burn Natural Gas-Fired IC Engine) ATC N-4238-2-3 (4,445 BHP Caterpillar Model G3616 Lean Burn Natural Gas-Fired IC Engine) ATC N-4238-3-3 (4,445 BHP Caterpillar Model G3616 Lean Burn Natural Gas-Fired IC Engine) ATC N-4238-4-3 (4,445 BHP Caterpillar Model G3616 Lean Burn Natural Gas-Fired IC Engine)	
6. TYPE OR PRINT NAME OF APPLICANT: Gregory N. Clark	TITLE OF APPLICANT: Compliance Manager
7. SIGNATURE OF APPLICANT: 	DATE: 5/9/14 PHONE: (209) 368-9277 ext. 21 FAX: (209) 368-9276 EMAIL: gclark@buckeye.com

For APCD Use Only: **RECEIVED**

DATE STAMP MAY 13 2014 SJVAPCD NORTHERN REGION	FILING FEE RECEIVED: \$ 0 CHECK#: _____ DATE PAID: _____ PROJECT NO: N1141799 FACILITY ID: N-4238
---	---

Central Regional Office • 1990 E. Gettysburg Avenue • Fresno, CA 93726-0244 • (559) 230-5900 • FAX (559) 230-6061

San Joaquin Valley Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Lodi Gas Storage, LLC	FACILITY ID: N - 4238
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Lodi Gas Storage, LLC	
3. Agent to the Owner:	

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

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

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

Robert Russell

Signature of Responsible Official

May 9, 2014

Date

Robert Russell

Name of Responsible Official (please print)

VP, Field Operations

Title of Responsible Official (please print)

Appendix IV

Emissions Change

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
N-4238-1-4	0	0	0	0	0
N-4238-2-4	0	0	0	0	0
N-4238-3-4	0	0	0	0	0
N-4238-4-4	0	0	0	0	0
TOTAL:	0	0	0	0	0

Appendix V

EPA's E-mail Correspondence

Wai-Man So

From: King, Melanie <King.Melanie@epa.gov>
Sent: Tuesday, April 01, 2014 11:25 AM
To: Wai-Man So
Cc: Nick Peirce
Subject: RE: Lodi Gas Storage Facility - Compressor Engines - Oil Testing Option

Hi, yes I did speak with Mr. Andrews. That is correct that when we made the latest revisions to Table 2d, we neglected to make corresponding updates to § 63.6625(j). Our intent is that all of the engines that have the footnote in Table 2d (and any engine subject to the oil change requirement) can use the oil analysis program.

Melanie King
Energy Strategies Group
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Mail Code D243-01
RTP, NC 27711
Phone: (919) 541-2469
Fax: (919) 541-5450
king.melanie@epa.gov

From: Wai-Man So [mailto:Wai-Man.So@valleyair.org]
Sent: Tuesday, April 01, 2014 2:08 PM
To: King, Melanie; King, Melanie
Cc: Nick Peirce
Subject: FW: Lodi Gas Storage Facility - Compressor Engines - Oil Testing Option

Good Morning Ms. King,

I just want to make sure EPA is aware of this issue, and currently allows the use of engine oil testing option for engines that are subject to item 8 of Table 2d of 40 CFR 63, Subpart ZZZZ.

Thanks advance for your assistance in this issue.

Wai-Man So
Air Quality Engineer
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way, Modesto, CA 95356
Phone (209) 557-6449 | Fax (209) 557-6475


HEALTHY AIR LIVING
www.healthyairliving.com

Make one change for clean air!

From: Tom W. Andrews [mailto:TAndrews@sierraresearch.com]
Sent: Tuesday, April 01, 2014 10:13 AM

To: Wai-Man So
Cc: Clark, Gregory N. (GClark@buckeye.com); Tom W. Andrews
Subject: RE: Lodi Gas Storage Facility - Compressor Engines - Oil Testing Option

Mr. Wai-Man So:

I recently dealt with this same issue for a different client and spoke to EPA about it. According to my recent discussions with the EPA group familiar with the development of the 40 CFR 63 Subpart ZZZZ regulations (Melanie King, King.Melanie@epamail.epa.gov, 919-541-2469), not listing Item 8 engines under Section 40 CFR 63.6625(j) was just an oversight. EPA intended for the Item 8 engines to be allowed to use the oil testing option to extend the length of time between oil changes. That is why in Table 2d for Item 8 engines there is the footnote citing the option for the oil testing program to extend the length of time between oil changes. EPA has this typo cleanup listed to be corrected in the next update/cleanup of 40 CFR 63 Subpart ZZZZ. Since EPA is allowing the oil testing option to be used for Item 8 engines, we are requesting that the SJVAPCD also allow this oil testing option to extend the length of time between oil changes. Sorry for the confusion on this issue, please let us know if you have any questions. Once again – thanks for your help on this.

From: Wai-Man So [<mailto:Wai-Man.So@valleyair.org>]
Sent: Monday, March 31, 2014 4:53 PM
To: Tom W. Andrews
Cc: Clark, Gregory N. (GClark@buckeye.com)
Subject: RE: Lodi Gas Storage Facility - Compressor Engines - Oil Testing Option

Good Afternoon Mr. Andrews,

I believe we discussed this comment in the past. The option of utilize an oil analysis program is only applicable for CI engine that is subject to items 1 or 4 of Table 2d, and SI engine that is subject to items 5,6,7,9, or 11 of Table 2d per §63.6625(i) and §63.6625(j) respectively.

However the proposed engines are subjected to item 8 of Table 2d of this subpart, therefore, the oil analysis program option is not applicable.

This was explained on page 10 of the same evaluation, and below is a screen shot of this discussion:

As describes in footnote 1 below, the owners/operators have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement of this subpart.

40 CFR 63 Subpart ZZZZ, section §63.6625(i) applies to stationary CI engine that is subject to the work, operation or management practices in items 1 or 4 of Table 2d to this subpart.

40 CFR 63 Subpart ZZZZ, section §63.6625(j) applies to stationary SI engine that is subject to the work, operation or management practices in items 5, 6, 7, 9, or 11 of Table 2d to this subpart.

The proposed engines are subjected to item 8 of Table 2d of this subpart, therefore, the oil analysis program option is not applicable. The owner/operator must follow the requirements prescribed in 40 CFR 63 Subpart ZZZZ Table 2(d)(8) listed above.

The following conditions will be listed on the ATC to ensure compliance:

- *The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ]*
- *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 Part 63 Subpart ZZZZ]*
- *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 Part 63 Subpart ZZZZ]*

In addition, 40 CFR 63 Subpart ZZZZ §63.6603(f) states owners and operators of existing non-emergency, SI 4SLB RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months.

¹ Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

Please feel free to contact me if you have any further questions.

Thank you, and have a nice evening.

Wai-Man So
Air Quality Engineer
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way, Modesto, CA 95356
Phone (209) 557-6449 | Fax (209) 557-6475

From: Tom W. Andrews [<mailto:TAndrews@sierraresearch.com>]
Sent: Monday, March 31, 2014 2:00 PM
To: Wai-Man So
Cc: Tom W. Andrews; Clark, Gregory N. (GClark@buckeye.com)
Subject: Lodi Gas Storage Facility - Compressor Engines - Oil Testing Option

Mr. Wai-Man So:

Please look at the enclosed copy of the SJVAPCD engineering evaluation for the recent updates to the permits for the compressor engines at Lodi Gas Storage. As shown on page 10 of the evaluation (see yellow highlighting), there is an option to extend the period of time required for engine oil changes if the facility performs an engine oil testing program. However, this option is not specifically listed in the final permit language regarding engine oil changes every 2,160 hours or annually (whichever is first). We want to confirm that it is OK for the facility to use this option to do an oil testing program (to extend the period of time required for an engine oil/oil filter change) because it is allowed under the 40 CFR 63 Subpart ZZZZ regulations. Thank you for your help on this and please let us know if you have any questions.

Tom Andrews

 **sierra research**
1801 J Street
Sacramento, CA 95811
(916) 273-5139 (direct/voice)
(916) 444-8373 (fax)