San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

NOV 12 2013

John Haley
Aera Energy, LLC
PO Box 11164
Bakersfield, CA 93389-1164

Re: Notice of Revised Final Action - Minor Title V Permit Modification
District Facility S-1548
Project 1131456

Dear Mr. Haley:

The Air Pollution Control Officer has revised the recently modified Title V permit for Aera Energy, LLC at Aera's Light Oil Western Stationary Source in Kern County. During recently permit modification for 10 IC engines the District added Inspection and Maintenance (I&M) requirements to be consistent with 40 CFR 63 Subpart ZZZZ for remote pipeline natural gas-fired engines as published in the Federal Register on January 30, 2013.

One of the conditions that was added required the engines' idling time to not exceed 30 minutes. As a result of discussions between the District, EPA and Aera, it was determined that having Aera maintain a written workplace standard that addressed the minimization of the idling time would suffice to assure compliance with the idle time requirement and that no actual monitoring and recordkeeping of engine idle time would be required. This requrement, which reads, "Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time", was inadvertantly not-included in the permits that were recently issued, and is being added with this action.

Enclosed are the revised Title V permits. The application and proposal were sent to US EPA Region IX on May 28, 2013, and final notice was issued on 10/16/13. All comments received have been addressed by the District. The final permits have been revised as described above.

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

www.valleyair.org www.healthyairliving.com

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NOV 12 2013

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

Sincerely,

David Warner
Director of Permit Services

DW:SR

Enclosures

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-171-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NE13 **TOWNSHIP:** 28S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
1,215 BHP WAUKESHA MODEL L-5790 GSI NATURAL GAS-FIRED IC ENGINE (SERIAL # C-12312/1) WITH 3-WAY CATALYST AND AIR/FUEL RATIO CONTROLLER DRIVING A GAS COMPRESSOR (MID BELRIDGE COMPRESSOR STATION #26)

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated with this engine/compressor shall not exceed 3.9 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

17. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

20. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
24. If the IC engine is fired on certified natural gas, then permittee document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. If the IC engine is not fired on certified natural gas, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for total sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors, and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
31. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
32. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

45. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-172-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NE32 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated with permit units S-1548-172 through '-175 shall not exceed 15.6 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

17. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

20. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
24. If the IC engine is fired on certified natural gas, then permittee document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. If the IC engine is not fired on certified natural gas, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for total sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors, and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Components to be screened shall be identified and categorized according to thc following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
31. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
32. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

45. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-173-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NE32 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,478 HBP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated with permit units S-1548-172 through '-175 shall not exceed 15.6 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

17. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

20. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
24. If the IC engine is fired on certified natural gas, then permittee document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. If the IC engine is not fired on certified natural gas, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for total sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors, and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
31. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
32. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

45. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-174-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NE32 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated with permit units S-1548-172 through '-175 shall not exceed 15.6 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

17. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

20. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

24. If the IC engine is fired on certified natural gas, then permittee document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. If the IC engine is not fired on certified natural gas, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for total sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

26. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

28. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

29. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors, and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit

30. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit

31. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit

32. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit

33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit

35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit

37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

45. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-175-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NE32 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated with permit units S-1548-172 through '-175 shall not exceed 15.6 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) - 25 ppmv @ 15% O2, VOC - 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

17. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

20. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
24. If the IC engine is fired on certified natural gas, then permittee document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. If the IC engine is not fired on certified natural gas, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for total sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors, and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
31. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
32. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

45. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-400-14 **EXPIRATION DATE:** 05/31/2016

SECTION: SE35 **TOWNSHIP:** 27S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND O2 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
2. The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
3. 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
4. Emissions of oxides of nitrogen (NOx) shall be reduced by 96% across catalytic converter or emissions of NOx shall not exceed 25 ppmv on a dry basis corrected to 15% oxygen. [District Rule 4702]
5. To demonstrate compliance with Rule 4702 requirement of 90 percent NOx reduction, percent reduction shall be calculated as follows: 1) The operator shall document the unit's typical operating parameters, loading, and duty cycle. 2) The documented conditions shall be repeated at each successive post-control source test. 3) Source test results will be tabulated to compare uncontrolled and post-controlled emission rates and to verify percent reduction limit. [District Rule 4702, 5.3.2] Federally Enforceable Through Title V Permit
6. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
7. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
8. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit

13. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

15. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

16. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

17. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

18. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

20. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702, 6.5.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
22. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
23. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. If the IC engine is not fired on natural gas with supplier certified sulfur content , then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
30. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
31. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. Fugitive components associated with the SulfaTreat sulfur removal system shall not exceed the following: 16 flanges, 24 threaded connectors, 8 valves, 2 pressure relief valves, and 4 other. [District Rule 2201] Federally Enforceable Through Title V Permit
34. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
35. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
36. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

38. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

39. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. Note: Formerly S-1130-146.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-411-14 **EXPIRATION DATE:** 05/31/2016

SECTION: SE35 **TOWNSHIP:** 27S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND O2 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
2. The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
3. 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
4. Emissions of oxides of nitrogen (NOx) shall be reduced by 96% across catalytic converter or emissions of NOx shall not exceed 25 ppmv on a dry basis corrected to 15% oxygen. [District Rule 4702]
5. To demonstrate compliance with Rule 4702 requirement of 90 percent NOx reduction, percent reduction shall be calculated as follows: 1) The operator shall document the unit's typical operating parameters, loading, and duty cycle. 2) The documented conditions shall be repeated at each successive post-control source test. 3) Source test results will be tabulated to compare uncontrolled and post-controlled emission rates and to verify percent reduction limit. [District Rule 4702, 5.3.2] Federally Enforceable Through Title V Permit
6. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
7. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
8. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit

13. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

15. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

16. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

17. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

18. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 5.6.7, 6.5.6] Federally Enforceable Through Title V Permit

19. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

20. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702, 6.5.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
23. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. If the IC engine is not fired on natural gas with supplier certified sulfur content , then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
30. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
31. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
34. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
35. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
36. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
37. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

39. Note: Formerly S-1130-157.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-433-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NW 2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 0.88 grains/100 dscf (15 ppmv). [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall comply with all applicable provisions of District Rule 4403. [District Rule 4403] Federally Enforceable Through Title V Permit
14. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
15. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NOx (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 25 or EPA Method 18 referenced as methane, ASTM D 3246 or double GC for total fuel gas sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rules 1081 and 2520, 9.3.2] 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 (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] 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 permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit
23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

25. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

26. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

27. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

29. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. If the IC engine is not fired on natural gas with supplier certified sulfur content , then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

31. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

33. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit

34. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

35. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit

36. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

37. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

38. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

40. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

41. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

42. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

43. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

44. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-434-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NW 2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
16. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
18. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. 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
21. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D 3246 or double GC for total fuel gas sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

25. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

27. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

28. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

30. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

31. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. If the IC engine is not fired on natural gas with supplier certified sulfur content , then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

34. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
37. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
38. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
39. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
41. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4702, 6.2.3 and 2520, 9.4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
44. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
45. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
46. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
47. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-435-6 **EXPIRATION DATE:** 05/31/2016

SECTION: NW 2 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
1,680 HP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4403. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 5.2.4 of Rule 4403. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
16. 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. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
18. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. 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
21. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, ASTM D 3246 or double GC for total fuel gas sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit

25. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.5.8] Federally Enforceable Through Title V Permit

27. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

28. 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 no later than 14 days after the change for approval. 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 Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

30. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

31. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. If the IC engine is not fired on natural gas with supplier certified sulfur content , then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

34. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
36. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
37. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
38. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
39. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
41. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
42. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
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