



JUL 15 2013

Mr. Joe Miller
West Kern Water District
PO Box 1105
Taft, CA 93268

Re: Notice of Minor Title V Permit Modification
District Facility # S-348
Project # S-1114577

Dear Mr. Miller:

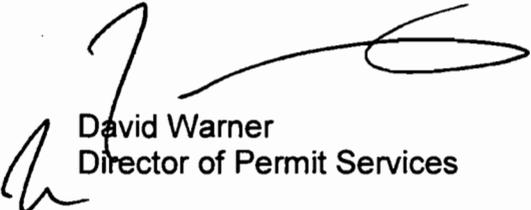
Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-348-4-10 and '5-7 into the Title V operating permit. The existing catalyst systems on the permit units were replaced with new 3-way catalysts for District Rule 4702 compliance. You also proposed to comply with 40 CFR 63 Subpart ZZZZ management practice requirements for permit units '4 and '5.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-348-4-10 and '5-7, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,


David Warner
Director of Permit Services

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
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Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1114577

Engineer: John Yoshimura
Date: 6/17/13

Facility Number: S-348
Facility Name: West Kern Water District
Mailing Address: PO Box 1105
Taft, CA 93268

Contact Name: Joe Miller
Phone: (661) 763-3451

Responsible Official: JD Bramlet
Title: Director of Operations

I. PROPOSAL

West Kern Water District (WKWD) is proposing a Title V minor permit modification to incorporate the recently issued S-348-4-10 and '5-7 into the Title V operating permit. The applicant proposed to replace the existing catalyst system on each permit unit with new 3-way catalysts for District Rule 4702 compliance. ATC project, S-1114576, also required the installation of a new catalyst for 40 CFR 63 Subpart ZZZZ compliance; however, the requirements for Subpart ZZZZ were amended in January 2013 and the modifications for compliance are no longer required. The amended conditions will be discussed in Section VI below.

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

II. FACILITY LOCATION

The facility is located at Pump Station A in section NE5, Township 31S, Range 25E, near the intersection of Highway 119 and CA aqueduct.

III. EQUIPMENT DESCRIPTION

S-348-4-11: 778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

S-348-5-8: 840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

IV. SCOPE OF EPA AND PUBLIC REVIEW

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

V. APPLICABLE REQUIREMENTS

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

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

WKWD is proposing to replace the existing catalyst system equipped on permit units '4 and '5 with new 3-way catalysts. These modifications will ensure the engines will be in compliance with the NOx emissions limits from District Rule 4702.

S-348-4-11:

Permit conditions 1 through 11 on the current Permit to Operate S-348-4-9 are represented by permit conditions 1 through 11 on the proposed Permit to Operate S-348-4-11.

Permit conditions 12 and 13 on the current Permit to Operate S-348-4-9 have been replaced by permit conditions 12 and 13 on the proposed Permit to Operate S-348-4-11. The NOx emission limits from S-348-4-9 have been reduced from 25 ppmv to 11 ppmv to meet District Rule 4702 requirements.

Permit conditions 14 through 34 on the current Permit to Operate S-348-4-9 are represented by permit conditions 14 through 34 on the proposed Permit to Operate S-348-4-11.

Permit condition 35 on the current Permit to Operate S-348-4-9 has been removed as this condition refers to requirements that have been subsumed by requirements in Rule 4702 and as such are no longer applicable.

Permit condition 36 on the current Permit to Operate S-348-4-9 is represented by permit condition 35 on the proposed Permit to Operate S-348-4-11.

Permit conditions 37 and 38 on the current Permit to Operate S-348-4-9 are represented by permit condition 36 and 37 on the proposed Permit to Operate S-348-4-11.

Permit condition 39 on the current Permit to Operate S-348-4-9 has been removed since WKWD applied for an Authority to Construct (ATC) to comply with 40 CFR 63 Subpart ZZZZ requirements.

Permit conditions 37 through 57 on the Authority to Construct S-348-4-10 have been removed since 40 CFR 63 Subpart ZZZZ was amended in January 2013 and those requirements are no longer applicable.

Permit condition 58 on the Authority to Construct S-348-4-10 has been removed since WKWD applied to modify their Title V permit through the Minor Modification process.

Permit conditions 38 through 44 on the proposed Permit to Operate S-348-4-11 have been added to ensure WKWD complies with the requirements of 40 CFR 63 Subpart ZZZZ for spark-ignited 4-stroke rich burn engines greater than 500 bhp located at an Area source of HAP emissions in a remote location.

S-348-5-8:

Permit conditions 1 through 34 on the current Permit to Operate S-348-5-6 are represented by permit conditions 1 through 34 on the proposed Permit to Operate S-348-5-8.

Permit condition 35 on the current Permit to Operate S-348-5-6 was removed due to duplicate requirements with conditions 18 through 21 of the proposed Permit to Operate S-348-5-8.

Permit conditions 36 through 56 on the Authority to Construct S-348-5-8 have been removed since 40 CFR 63 Subpart ZZZZ was amended in January 2013 and those requirements are no longer applicable.

Permit condition 57 on the Authority to Construct S-348-5-7 has been removed since ATC S-348-5-6 was implemented before ATC '5-8.

Permit condition 58 on the Authority to Construct S-348-5-7 has been removed since WKWD applied to modify their Title V permit through the Minor Modification process.

Permit conditions 35 through 41 on the proposed Permit to Operate S-348-5-8 have been added to ensure WKWD complies with the requirements of 40 CFR 63 Subpart ZZZZ for spark-ignited 4-stroke rich burn engines greater than 500 bhp located at an Area source of HAP emissions in a remote location.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

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

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and

3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit No. S-348-4-11 and '-5-8
- B. Authorities to Construct No. S-348-4-10 and '-5-7
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit No.'s S-348-4-9 and '-5-6

ATTACHMENT A

Proposed Modified Title V Operating Permit No.
(S-348-4-11 and '-5-8)

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-4-11

EXPIRATION DATE: 10/31/2016

SECTION: 32 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:

778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
2. 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 Rule 407 (Kern)] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas that is not PUC-regulated, 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] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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 Rule 2201] Federally Enforceable Through Title V Permit
10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
11. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit

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

12. Emissions from this IC engine shall not exceed any of the following when fired on LPG: 11 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O₂ or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O₂ or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.075 g-PM₁₀/hp-hr; 0.011 g-SO_x /hp-hr. [District Rules 2201 and 4702]
13. Emissions from this IC engine shall not exceed any of the following when fired on PUC-quality natural gas: 11 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O₂ or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O₂ or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.204 g-PM₁₀/hp-hr; 0.0145 g-SO_x /hp-hr. [District Rules 2201 and 4702]
14. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NO_x, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
16. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing for District Rule 4702 compliance 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]
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: NO_x (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
21. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of 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] Federally Enforceable Through Title V Permit
24. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] 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 for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
27. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
28. The engine shall be operated such that the O₂ sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
30. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
31. If the District or EPA determines 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 64.7 and 64.8] Federally Enforceable Through Title V Permit
32. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
33. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
35. Operator shall maintain records of hours of operation when firing on propane. [District Rule 4701] Federally Enforceable Through Title V Permit
36. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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

38. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
39. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. On and after October 19, 2013, the engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. On and after October 19, 2013, the engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. On and after October 19, 2013, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-5-8

EXPIRATION DATE: 10/31/2016

SECTION: NE 5 **TOWNSHIP:** 31S **RANGE:** 25E

EQUIPMENT DESCRIPTION:

840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
2. 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 Rule 407 (Kern)] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas that is not PUC-regulated, 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] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
10. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 10.4 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 68.4 ppmvd CO @ 15% O₂ or 0.60 g/bhp-hr, averaged over at least 15 minutes; 30 ppmvd VOC @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 0.175 g-PM₁₀/hp-hr; 0.012 g-SO_x /hp-hr. [District Rules 2201 and 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NO_x, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing for District Rule 4702 compliance 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]
16. 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
17. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
19. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of 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] Federally Enforceable Through Title V Permit

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

22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
27. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
29. If the District or EPA determines 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 64.7 and 64.8] Federally Enforceable Through Title V Permit
30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
33. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. On and after October 19, 2013, the engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

38. On and after October 19, 2013, the engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
39. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. On and after October 19, 2013, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

DRAFT

ATTACHMENT B

Authorities to Construct No.
(S-348-4-10 and '-5-7)



AUTHORITY TO CONSTRUCT

PERMIT NO: S-348-4-10

ISSUANCE DATE: 07/26/2012

LEGAL OWNER OR OPERATOR: WEST KERN WATER DISTRICT

MAILING ADDRESS: PO BOX 1105
TAFT, CA 93268

LOCATION: HWY 119 & CA AQUEDUCT
STATION A, CA

SECTION: 32 TOWNSHIP: 31S RANGE: 24E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP: REPLACE THE EXISTING CATALYST SYSTEM WITH A 3-WAY CATALYST AND INSTALL A CONTINUOUS PARAMETER MONITORING SYSTEM FOR RULE 4702 AND 40 CFR 63 SUBPART ZZZZ COMPLIANCE

CONDITIONS

1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
2. 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 Rule 407 (Kern)] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO


DAVID WARNER, Director of Permit Services

S-348-4-10; Jul 26 2012 3:54PM - YOSHIMUJI : Joint Inspection NDT Required

6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas that is not PUC-regulated, 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] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
10. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following when fired on LPG: 11 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O₂ or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O₂ or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.075 g-PM₁₀/hp-hr; 0.011 g-SO_x/hp-hr. [District Rules 2201 and 4702]
12. Emissions from this IC engine shall not exceed any of the following when fired on PUC-quality natural gas: 11 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O₂ or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O₂ or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.204 g-PM₁₀/hp-hr; 0.0145 g-SO_x/hp-hr. [District Rules 2201 and 4702]
13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
14. Source testing to measure natural gas-combustion NO_x, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing for District Rule 4702 compliance 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]
17. 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
18. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
21. 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] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of 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] Federally Enforceable Through Title V Permit
23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
27. The engine shall be operated such that the O₂ sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [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 64.7] 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 64.9] Federally Enforceable Through Title V Permit
30. If the District or EPA determines 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 64.7 and 64.8] Federally Enforceable Through Title V Permit
31. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
34. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
36. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. On and after October 19, 2013, performance testing to demonstrate compliance with the formaldehyde emission requirements shall be performed every 8,760 hours of operation or every 36 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
38. The permittee shall conduct the initial formaldehyde performance test or other compliance demonstration no later than 180 days after October 19, 2013. [40 CFR 63 Subpart ZZZZ]
39. On and after October 19, 2013, 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. After startup the emission standards applicable are specified in Table 2d of 40 CFR Part 63 Subpart ZZZZ. [40 CFR 63 Subpart ZZZZ]
40. On and after October 19, 2013, the formaldehyde emissions from the engine shall be reduced by 76% or shall not exceed 2.7 ppmvd @ 15% O₂. [40 CFR 63 Subpart ZZZZ]
41. On and after October 19, 2013, if complying with the formaldehyde reduction percentage via non-selective catalytic reduction (NSCR), the pressure drop across the catalyst shall not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test and the catalyst inlet temperature shall remain between 750 - 1250 degrees F. [40 CFR 63 Subpart ZZZZ]
42. On and after October 19, 2013, a Continuous Parameter Monitoring System (CPMS) shall be used to continuously monitor catalyst inlet temperature according to the following requirements of Subpart ZZZZ 63.6625(b): the CPMS must be installed, operated, and maintained in continuous operation according to the procedures in the site-specific monitoring plan; and the CPMS must collect data at least once every 15 minutes. [40 CFR 63 Subpart ZZZZ]
43. On and after October 19, 2013, the permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements identified in (i) through (v) as follows, or a site-specific district approved plan, and conduct performance evaluations of each CPMS in accordance with the site specific monitoring plan. The requirements include, but are not limited to: (i) the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; (ii) sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; (iii) equipment performance evaluations, system accuracy audits, or other audit procedures; (iv) installation of the CPMS sampling probe or other interface at the appropriate location to obtain representative measurements; (v) performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems; (vi) performance evaluation procedures and acceptance criteria (e.g., calibrations); (vii) ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3) and (c)(4)(ii); (viii) ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and (ix) ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [40 CFR 63 Subpart ZZZZ]
44. On and after October 19, 2013, for a CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. [40 CFR 63 Subpart ZZZZ]

CONDITIONS CONTINUE ON NEXT PAGE

45. On and after October 19, 2013, the formaldehyde after-treatment control device, if any, shall be maintained per manufacturer recommendations. [40 CFR 63 Subpart ZZZZ]
46. On and after October 19, 2013, the performance test shall consist of selecting the sampling port location and number of traverse point using Method 1 or 1A of 40 CFR Part 60, Appendix A. Sampling sites must be located at the inlet and outlet of the control device. [40 CFR 63 Subpart ZZZZ]
47. On and after October 19, 2013, the performance test shall consist of measuring O₂ at the inlet and outlet of the control device using Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522-00m (2005). Measurements to determine the O₂ concentration must be made at the same time as the formaldehyde concentration measurements. [40 CFR 63 Subpart ZZZZ]
48. On and after October 19, 2013, the performance test shall consist of measuring the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348-03. Measurements to determine the moisture content must be made at the same time as the formaldehyde concentration measurements. [40 CFR 63 Subpart ZZZZ]
49. On and after October 19, 2013, the performance test shall consist of measuring the formaldehyde at the inlet and outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Formaldehyde concentration shall be corrected to 15% O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. [40 CFR 63 Subpart ZZZZ]
50. On and after October 19, 2013, the owner/operator shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is schedule to begin as required in Section 63.7(b)(1). [40 CFR 63 Subpart ZZZZ]
51. On and after October 19, 2013, the owner/operator shall submit a Notification of Compliance Status according to Section 63.9(h)(2)(ii). For each initial compliance demonstration required in Table 5 of Subpart ZZZZ that includes a performance test according to the requirements in Table 3 of Subpart ZZZZ , the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to Section 63.109(d)(2). [40 CFR 63 Subpart ZZZZ]
52. On and after October 19, 2013, the permittee may request the District approve a correlation between formaldehyde and VOC emissions, based on the initial source test. The permittee may use the approved correlation with subsequent VOC source test results to show compliance with the 76% formaldehyde reduction requirement from Subpart ZZZZ. [40 CFR 63 Subpart ZZZZ]
53. On and after October 19, 2013, the owner/operator shall submit an initial compliance demonstration report to the District within 60 days after the required source test. [District Rule 1081 and 40 CFR 63 Subpart ZZZZ]
54. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ]
55. On and after October 19, 2013, the permittee shall maintain monthly records of each period during which a CPMS is malfunctioning or inoperative (including out-of-control-periods); all results of performance tests, CPMS performance evaluations, and opacity and visible emission observations; all measurements as may be necessary to determine the conditions of performance tests and performance evaluations; all CPMS calibration checks; and all adjustments and maintenance performed on CPMS. [40 CFR 63 Subpart ZZZZ]
56. On and after October 19, 2013, the permittee shall keep previous (i.e., superceded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CPMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts. [40 CFR 63 Subpart ZZZZ]

CONDITIONS CONTINUE ON NEXT PAGE

57. The permittee shall conduct a required source test within a 60-day window no more than 30 days before or after the required date. Any testing that occurs after this required test window is a violation unless a variance has been approved prior to the end of the test window or that the source has received an ATC that modifies the test date. Any testing that occurs prior to the 60-day window shall require District approval and subsequent test dates will be determined on a case-by-case basis. [40 CFR 63 Subpart ZZZZ]
58. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-348-5-7

ISSUANCE DATE: 07/26/2012

LEGAL OWNER OR OPERATOR: WEST KERN WATER DISTRICT

MAILING ADDRESS: PO BOX 1105
TAFT, CA 93268

LOCATION: HWY 119 & CA AQUEDUCT
STATION A, CA

SECTION: NE 5 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP. REPLACE THE EXISTING CATALYST SYSTEM WITH A 3-WAY CATALYST AND INSTALL A CONTINUOUS PARAMETER MONITORING SYSTEM FOR RULE 4702 AND 40 CFR 63 SUBPART ZZZZ COMPLIANCE

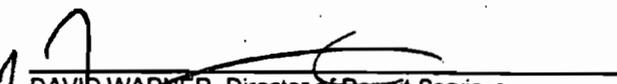
CONDITIONS

1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
2. 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 Rule 407 (Kern)] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO


DAVID WARNER, Director of Permit Services

S-348-5-7 Jul 28 2012 2:04PM - YOSHIMAJI : Joint Inspection NOT Required

6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas that is not PUC-regulated, 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] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
10. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 10.4 ppmvd NO_x @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 68.4 ppmvd CO @ 15% O₂ or 0.60 g/bhp-hr, averaged over at least 15 minutes; 30 ppmvd VOC @ 15% O₂ or 0.15 g/bhp-hr, averaged over at least 15 minutes; 0.175 g-PM₁₀/hp-hr; 0.012 g-SO_x /hp-hr. [District Rules 2201 and 4702]
12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NO_x, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing for District Rule 4702 compliance 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]
16. 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
17. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of 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] Federally Enforceable Through Title V Permit
22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The engine shall be operated such that the O₂ sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
27. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
29. If the District or EPA determines 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 64.7 and 64.8] Federally Enforceable Through Title V Permit
30. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
33. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. On and after October 19, 2013, 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. On and after October 19, 2013, performance testing to demonstrate compliance with the formaldehyde emission requirements shall be performed every 8,760 hours of operation or every 36 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
37. The permittee shall conduct the initial formaldehyde performance test or other compliance demonstration no later than 180 days after October 19, 2013. [40 CFR 63 Subpart ZZZZ]
38. On and after October 19, 2013, 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. After startup the emission standards applicable are specified in Table 2d of 40 CFR Part 63 Subpart ZZZZ. [40 CFR 63 Subpart ZZZZ]
39. On and after October 19, 2013, the formaldehyde emissions from the engine shall be reduced by 76% or shall not exceed 2.7 ppmvd @ 15% O₂. [40 CFR 63 Subpart ZZZZ]
40. On and after October 19, 2013, if complying with the formaldehyde reduction percentage via non-selective catalytic reduction (NSCR), the pressure drop across the catalyst shall not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test and the catalyst inlet temperature shall remain between 750 - 1250 degrees F. [40 CFR 63 Subpart ZZZZ]
41. On and after October 19, 2013, a Continuous Parameter Monitoring System (CPMS) shall be used to continuously monitor catalyst inlet temperature according to the following requirements of Subpart ZZZZ 63.6625(b): the CPMS must be installed, operated, and maintained in continuous operation according to the procedures in the site-specific monitoring plan; and the CPMS must collect data at least once every 15 minutes. [40 CFR 63 Subpart ZZZZ]
42. On and after October 19, 2013, the permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements identified in (i) through (v) as follows, or a site-specific district approved plan, and conduct performance evaluations of each CPMS in accordance with the site specific monitoring plan. The requirements include, but are not limited to: (i) the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; (ii) sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; (iii) equipment performance evaluations, system accuracy audits, or other audit procedures; (iv) installation of the CPMS sampling probe or other interface at the appropriate location to obtain representative measurements; (v) performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems; (vi) performance evaluation procedures and acceptance criteria (e.g., calibrations); (vii) ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3) and (c)(4)(ii); (viii) ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and (ix) ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [40 CFR 63 Subpart ZZZZ]
43. On and after October 19, 2013, for a CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. [40 CFR 63 Subpart ZZZZ]

CONDITIONS CONTINUE ON NEXT PAGE

44. On and after October 19, 2013, the formaldehyde after-treatment control device, if any, shall be maintained per manufacturer recommendations. [40 CFR 63 Subpart ZZZZ]
45. On and after October 19, 2013, the performance test shall consist of selecting the sampling port location and number of traverse point using Method 1 or 1A of 40 CFR Part 60, Appendix A. Sampling sites must be located at the inlet and outlet of the control device. [40 CFR 63 Subpart ZZZZ]
46. On and after October 19, 2013, the performance test shall consist of measuring O₂ at the inlet and outlet of the control device using Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522-00m (2005). Measurements to determine the O₂ concentration must be made at the same time as the formaldehyde concentration measurements. [40 CFR 63 Subpart ZZZZ]
47. On and after October 19, 2013, the performance test shall consist of measuring the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348-03. Measurements to determine the moisture content must be made at the same time as the formaldehyde concentration measurements. [40 CFR 63 Subpart ZZZZ]
48. On and after October 19, 2013, the performance test shall consist of measuring the formaldehyde at the inlet and outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Formaldehyde concentration shall be corrected to 15% O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. [40 CFR 63 Subpart ZZZZ]
49. On and after October 19, 2013, the owner/operator shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is schedule to begin as required in Section 63.7(b)(1). [40 CFR 63 Subpart ZZZZ]
50. On and after October 19, 2013, the owner/operator shall submit a Notification of Compliance Status according to Section 63.9(h)(2)(ii). For each initial compliance demonstration required in Table 5 of Subpart ZZZZ that includes a performance test according to the requirements in Table 3 of Subpart ZZZZ, the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to Section 63.109(d)(2). [40 CFR 63 Subpart ZZZZ]
51. On and after October 19, 2013, the permittee may request the District approve a correlation between formaldehyde and VOC emissions, based on the initial source test. The permittee may use the approved correlation with subsequent VOC source test results to show compliance with the 76% formaldehyde reduction requirement from Subpart ZZZZ. [40 CFR 63 Subpart ZZZZ]
52. On and after October 19, 2013, the owner/operator shall submit an initial compliance demonstration report to the District within 60 days after the required source test. [District Rule 1081 and 40 CFR 63 Subpart ZZZZ]
53. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ]
54. On and after October 19, 2013, the permittee shall maintain monthly records of each period during which a CPMS is malfunctioning or inoperative (including out-of-control-periods); all results of performance tests, CPMS performance evaluations, and opacity and visible emission observations; all measurements as may be necessary to determine the conditions of performance tests and performance evaluations; all CPMS calibration checks; and all adjustments and maintenance performed on CPMS. [40 CFR 63 Subpart ZZZZ]
55. On and after October 19, 2013, the permittee shall keep previous (i.e., superceded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CPMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts. [40 CFR 63 Subpart ZZZZ]

CONDITIONS CONTINUE ON NEXT PAGE

56. The permittee shall conduct a required source test within a 60-day window no more than 30 days before or after the required date. Any testing that occurs after this required test window is a violation unless a variance has been approved prior to the end of the test window or that the source has received an ATC that modifies the test date. Any testing that occurs prior to the 60-day window shall require District approval and subsequent test dates will be determined on a case-by-case basis. [40 CFR 63 Subpart ZZZZ]
57. Authority to Construct (ATC) S-348-5-6 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]
58. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-348-4-11	-2,990	0	0	0	0
S-348-5-8	0	0	0	0	0
TOTAL	-2,990	0	0	0	0

ATTACHMENT D

Application

RECEIVED

San Joaquin Valley Air Pollution Control District NOV 21 2011

www.valleyair.org

Permits Services SJVAPCD

Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO West Kern Water District	
2. MAILING ADDRESS: STREET/P.O. BOX: <u>P.O. Box 1105</u> CITY: <u>Taft</u> STATE: <u>CA</u> 9-DIGIT ZIP CODE: <u>93268-1105</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: _____ CITY: _____ NE ¼ SECTION <u>5</u> TOWNSHIP <u>31S</u> RANGE <u>25E</u>	INSTALLATION DATE: <u>2/1/2012</u>
4. GENERAL NATURE OF BUSINESS: Water Utility	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Install a larger catalytic converter on Unit A2-4, permit number S-348-5 to comply with 40 CFR 63, ZZZZ	
6. TYPE OR PRINT NAME OF APPLICANT: Joseph W. Miller	TITLE OF APPLICANT: Air Quality Officer
7. SIGNATURE OF APPLICANT: <i>Joseph W. Miller</i>	DATE: <u>Nov.21,2011</u> PHONE: (661) 7633151 FAX: (661) 7655435 EMAIL: joe@wkwd.org

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ <u>0</u> CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>S-1114577</u> FACILITY ID: <u>S-348</u>

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

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: West Kern Water District	FACILITY ID: S - 348
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Utility	
2. Owner's Name: West Kern Water District	
3. Agent to the Owner:	

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

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

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



Signature of Responsible Official

11-17-2011

Date

JD Bramlet

Name of Responsible Official (please print)

Director of Operations

Title of Responsible Official (please print)

ATTACHMENT E

Previous Title V Operating Permit No.'s
S-348-4-9 and '-5-6

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-4-9

EXPIRATION DATE: 10/31/2016

SECTION: 32 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:

778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 4702 and 4801] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
6. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas but not PUC-regulated 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] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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
10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
11. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions from IC engine shall not exceed any of the following when fired on LPG: NO_x (as NO₂) - 25 ppmv @ 15% O₂, VOC - 125 ppmv @ 15% O₂, CO - 2000 ppmv @ 15% O₂, PM₁₀ - 0.204 g/hp-hr, or SO_x (as SO₂) - 0.0145 g/hp-hr. [District NSR Rule and Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Emissions from IC engine shall not exceed any of the following when fired on PUC-quality natural gas: NOx (as NO₂) - 25 ppmv @ 15% O₂, VOC - 125 ppmv @ 15% O₂, CO - 2000 ppmv @ 15% O₂, PM₁₀ - 0.075 g/hp-hr, or SOx (as SO₂) - 0.011 g/hp-hr. [District NSR Rule and Rule 4702] Federally Enforceable Through Title V Permit
14. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
16. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [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; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 4702] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
21. If either the NOx or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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] Federally Enforceable Through Title V Permit
23. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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24. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District NSR Rule, Rule 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] 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 for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
27. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
28. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
30. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
31. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
32. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
33. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
35. This engine shall only be fired on propane during natural gas curtailment or maintenance testing for no more than 336 cumulative hours in a calendar year. [District Rule 4701] Federally Enforceable Through Title V Permit
36. Operator shall maintain records of hours of operation when firing on propane. [District Rule 4701] Federally Enforceable Through Title V Permit
37. Operator shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
39. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-5-6

EXPIRATION DATE: 10/31/2016

SECTION: NE 5 **TOWNSHIP:** 31S **RANGE:** 25E

EQUIPMENT DESCRIPTION:

840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. 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
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [District Rules 4702 and 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084, or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas but not PUC-regulated 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] Federally Enforceable Through Title V Permit
8. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
9. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
10. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
11. NOx exhaust emissions shall not exceed 0.15 g/bhp-hr or 10.4 ppmvd (calculated to 15% oxygen). CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmvd (calculated to 15% oxygen). VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30.0 ppmvd (calculated to 15% oxygen). [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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Facility Name: WEST KERN WATER DISTRICT

Location: HWY 119 & CA AQUEDUCT, STATION A, CA

S-348-5-6 : Jun 17 2013 1:56PM - YOSHIMUJ

12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NO_x, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
15. 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
16. 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
17. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). 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 calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
19. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
27. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
29. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
33. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Sampling and monitoring to demonstrate ongoing compliance with NOx and CO limits shall be performed at least once per quarter using an instrument which has been calibrated using the procedure recommended by the manufacturer. [District Rule 1081] Federally Enforceable Through Title V Permit

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