



DEC 11 2014

Joey Barulich  
Vintage Production California LLC  
9600 Ming Avenue, Suite 300  
Bakersfield, CA 93311

**Re: Notice of Final Action - Minor Title V Permit Modification  
District Facility # S-1738  
Project # 1141139**

Dear Mr. Barulich:

The Air Pollution Control Officer has modified the Title V permit for Vintage Production California LLC by incorporating Authorities to Construct (ATCs) S-1738-57-12, '-59-11, '-389-3, '-391-3, '-393-4, '-394-5, '-395-3, '-396-5, '-397-3 thru '-400-3, '-402-2, '-406-3, '-407-5, '-448-5, and '-450-5. The ATCs authorized, 1) reduction of NOx emissions limits of 17 IC engines for compliance with Rule 4702, 2) addition of NSPS Subpart ZZZZ requirements where applicable, 3) additional authorized locations for specific units, 4) addition of APCO approved alternative to hour meter for specific units, and 5) addition of compliant DEU conditions to specific units.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on October 21, 2014. No comments were received following the District's preliminary decision on this project.

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

Sincerely,

Arnaud Marjollet  
Director of Permit Services

AM:rue

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email  
Seyed Sadredin  
Executive Director/Air Pollution Control Officer

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

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

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-57-13

**EXPIRATION DATE:** 02/28/2018

**SECTION:** SE24 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

195 BHP WAUKESHA NATURAL GAS FIRED I.C. ENGINE EQUIPPED WITH JOHNSON-MATTHEY MODEL MX-10 NSCR (LANDSLIDE WELL 85-24)

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following limits: NOx: 11 ppmv @ 15% O<sub>2</sub>, CO: 2000 ppmv @ 15% O<sub>2</sub>, or VOC: 159 ppmv @ 15% O<sub>2</sub>. [District Rule 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
9. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
10. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
14. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 108, 4701 and 4702] Federally Enforceable Through Title V Permit
22. An operating log record shall be maintained that includes compliance source test results, monitoring data, make and model of exhaust gas analyzer, exhaust gas analyzer calibration records, and catalyst maintenance and cleaning intervals. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
25. 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
26. 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
27. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
28. The engine's spark plugs shall be inspected every 1,440 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
29. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
30. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
31. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
32. 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] Federally Enforceable Through Title V Permit
33. 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
34. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-59-12

**EXPIRATION DATE:** 02/28/2018

**SECTION:** SW19 **TOWNSHIP:** 11N **RANGE:** 21W

**EQUIPMENT DESCRIPTION:**

208 BHP WAUKESHA MODEL F1905GRU NATURAL GAS-FIRED RICH-BURN IC ENGINE WITH HOUSTON INDUSTRIAL SILENCING DN/S-2085C DENOX CATALYTIC CONVERTER (LANDSLIDE LEASE WELL 48X-19)

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. Engine shall be maintained according to engine manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
4. Emissions from the engine shall not exceed any of the following limits: 11 ppmv-NOx @ 15% O2, 2,000 ppmv-CO @ 15% O2 and 81 ppmv-VOC @ 15% O2. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
5. This unit shall be fired only on gas with a sulfur content not exceeding 1 grain/100 dscf. [District Rule 2201 and Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
8. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
9. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
10. 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 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The permittee shall monitor and record the stack concentration of NOX (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. If the NOX or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NOX and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records using Protocol 1 gases, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. 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
16. If the engine is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
19. The requirements of SJVAPCD District Rule 1080 (Amended December 17, 1992), do not apply to this source because this unit is subject to alternate monitoring in lieu of any continuous emission monitoring requirements. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
21. Catalyst shall be periodically inspected and cleaned according to manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit

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

22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, VOC (ppmv) - EPA Method 25 or 25B, or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
25. 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
26. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. An operating log record shall be maintained that includes, on a monthly basis, the total hours of operation, the type and quantity of fuel used, maintenance or modifications performed, compliance source test results, monitoring data, and any other information necessary to demonstrate compliance with rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with District Rules for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1081 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. 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
31. 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
32. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
33. The engine's spark plugs shall be inspected every 1,440 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
34. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
35. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [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.

37. 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] Federally Enforceable Through Title V Permit
38. 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
39. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-389-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 34 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 399558) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM<sub>10</sub>: 0.01 g/bhp-hr; NO<sub>x</sub> (as NO<sub>2</sub>): 11 ppmvd @15% O<sub>2</sub>; VOC (as CH<sub>4</sub>): 40 ppmvd @15% O<sub>2</sub>; CO: 140 ppmvd @15% O<sub>2</sub>; or SO<sub>x</sub> (as SO<sub>2</sub>): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-359.
49. Formerly permit number S-3898-44.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-391-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 4 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 399561) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rules 4701, and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-361.
49. Formerly permit number S-3898-46.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-393-3

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 33 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 338528) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Upon recommencing operation, this IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
4. Upon recommencing operation, emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
6. Upon recommencing operation, if the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

7. Upon recommencing operation, the permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
8. A source test to demonstrate compliance with NO<sub>x</sub>, CO, and VOC emission limits shall be performed within 60 days of recommencing operation of the dormant unit, except as provided below. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
9. Upon recommencing operation, source test to show compliance with NO<sub>x</sub>, CO, and VOC emission limits shall be conducted once every 24 months by District-witnessed sample collection by independent testing laboratory. [District Rule 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
11. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. Upon recommencing operation, should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
14. 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
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Upon recommencing operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

20. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Upon recommencing operation, all units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Upon recommencing operation, the number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Upon recommencing operation, 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]
24. Upon recommencing operation, particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
25. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
28. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
29. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
31. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District 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.

33. Formerly permit number S-1548-363.

34. Formerly permit number S-3898-48.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-394-6

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 4 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 381170) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
8. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rules 2201, 4701 & 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701& 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.

10. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4701& 4702] Federally Enforceable Through Title V Permit
11. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of 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 4701& 4702] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701& 4702] Federally Enforceable Through Title V Permit
15. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rule 4701& 4702] Federally Enforceable Through Title V Permit
16. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701& 4702] Federally Enforceable Through Title V Permit
17. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
18. 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
19. 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
20. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 & 4702] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. 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
28. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit
29. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
32. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
34. 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
35. The engine's oil and filter shall be changed every 1,440 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.

36. The engine's spark plugs shall be inspected every 1,440 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
37. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
39. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. 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] Federally Enforceable Through Title V Permit
41. 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
42. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
43. Formerly permit number S-3898-49.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-395-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 33 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

DORMANT 162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 328571) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM<sub>10</sub>: 0.01 g/bhp-hr; NO<sub>x</sub> (as NO<sub>2</sub>): 11 ppmvd @15% O<sub>2</sub>; VOC (as CH<sub>4</sub>): 40 ppmvd @15% O<sub>2</sub>; CO: 140 ppmvd @15% O<sub>2</sub>; or SO<sub>x</sub> (as SO<sub>2</sub>): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-365.
49. Formerly permit number S-3898-50.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-396-6

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 4 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 32563) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. While dormant, the fuel line shall be physically disconnected from the emissions unit. [District Rule 2080] Federally Enforceable Through Title V Permit
6. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Upon recommencing operation of this unit, normal monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
10. If this unit has become dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
11. 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

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

12. This IC engine is approved to operate at various unspecified locations within Vintage's light oil western stationary source. No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
13. The IC engine shall not operate within 1000' of K-12th grade school [CH&SC 42301.6]
14. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Compliance with NOx, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
20. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
21. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
22. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules, 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
28. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
30. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. 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
34. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
35. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
36. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
38. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
39. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
40. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
41. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
42. 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
43. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. 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
45. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
46. The engine's spark plugs shall be inspected every 1,440 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
47. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
48. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
49. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
50. 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] 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.

51. 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
52. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
53. Formerly permit number S-1548-366.
54. Formerly permit number S-3898-51.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-397-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 33 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 327689) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM<sub>10</sub>: 0.01 g/bhp-hr; NO<sub>x</sub> (as NO<sub>2</sub>): 11 ppmvd @15% O<sub>2</sub>; VOC (as CH<sub>4</sub>): 40 ppmvd @15% O<sub>2</sub>; CO: 140 ppmvd @15% O<sub>2</sub>; or SO<sub>x</sub> (as SO<sub>2</sub>): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [Districts NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701, 4702, and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-367.
49. Formerly permit number S-3898-52.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-398-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 34 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 BHP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 39653) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 25-34 (DORMANT)

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
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<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701] Federally Enforceable Through Title V Permit
18. Upon recommencing operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
21. 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
22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
23. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. Upon recommencing operation, if the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
30. 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
31. 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
32. 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
33. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
34. The engine's spark plugs shall be inspected every 1,440 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
35. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [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. 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] Federally Enforceable Through Title V Permit
39. 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
40. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
41. Formerly permit number S-1548-347.
42. Formerly permit number S-3898-53.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-399-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 33 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 BHP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 317685) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER (DORMANT)

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
5. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] 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. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
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<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
18. Upon recommencing operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
21. 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
22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
23. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. Upon recommencing operation, if the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
30. 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
31. 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
32. 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
33. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
34. The engine's spark plugs shall be inspected every 1,440 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
35. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [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. 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] Federally Enforceable Through Title V Permit
39. 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
40. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
41. Formerly permit number S-1548-347.
42. Formerly permit number S-3898-54.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-400-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 11 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 307940) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
5. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
8. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
9. Emissions rates shall not exceed any of the following: PM<sub>10</sub>: 0.01 g/bhp-hr; NO<sub>x</sub> (as NO<sub>2</sub>): 11 ppmvd @15% O<sub>2</sub>; VOC (as CH<sub>4</sub>): 40 ppmvd @15% O<sub>2</sub>; CO: 140 ppmvd @15% O<sub>2</sub>; or SO<sub>x</sub> (as SO<sub>2</sub>): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-370 and S-3898-55.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-402-6

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 34 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

COMPLIANT DORMANT 162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 413832) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
5. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4701 & 4702] Federally Enforceable Through Title V Permit
7. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4701 & 4702] Federally Enforceable Through Title V Permit
8. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4701 & 4702] Federally Enforceable Through Title V Permit
9. Emissions rates shall not exceed any of the following: PM<sub>10</sub>: 0.01 g/bhp-hr; NO<sub>x</sub> (as NO<sub>2</sub>): 11ppmvd @15% O<sub>2</sub>; VOC (as CH<sub>4</sub>): 40 ppmvd @15% O<sub>2</sub>; CO: 140 ppmvd @15% O<sub>2</sub>; or SO<sub>x</sub> (as SO<sub>2</sub>): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
16. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
17. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
25. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
29. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
30. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
33. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [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.

36. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. 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
40. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
48. Formerly permit number S-1548-372.
49. Formerly permit number S-3898-57.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-406-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 11 **TOWNSHIP:** 11N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 335150) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. IC engines are approved to operate at various unspecified locations within the Buena Vista field (Sections 1-18/T32S/25E) & (Sections 31-35/T31S/R25E). When operating in the Buena Vista field, IC engines must be at least 500 feet away from the nearest receptor. [District Rule 4102]
2. IC engines are approved to operate at various unspecified locations within the Pleito field (Sections 30-31/T11N/R20W) & (Sections 25, 26, 35, & 36/T11N/R21W). When operating in the Pleito field, IC engines must be at least 2,500 feet away from the nearest receptor. [District Rule 4102]
3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
5. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
6. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
7. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
8. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
9. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rule 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
10. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of 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 4701 and 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
16. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
17. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
18. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
19. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701 and 4702] Federally Enforceable Through Title V Permit

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

23. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
24. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub>, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
26. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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
30. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
31. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
34. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
35. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NO<sub>x</sub> and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [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.

36. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
37. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
38. 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
39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. 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
41. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. The engine's spark plugs shall be inspected every 1,440 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. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
46. 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] 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.

47. 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
48. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
49. Formerly permit number S-1548-377.
50. Formerly permit number S-3898-62.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-407-4

**EXPIRATION DATE:** 02/28/2018

**SECTION:** 32 **TOWNSHIP:** 12N **RANGE:** 22W

**EQUIPMENT DESCRIPTION:**

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 2055) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

---

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in the conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. Upon seven days prior written notice to the District, this unit may be designated as a dormant emissions unit or an active emissions unit. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, normal monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If this unit has become dormant because it does not comply with District Rules, or if the unit becomes out of compliance with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. This IC engine is approved to operate at various unspecified locations within Vintage's light oil western stationary source. No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
10. The IC engine shall not operate within 1000' of K-12th grade school [CH&SC 42301.6]
11. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [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. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
14. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Compliance with NO<sub>x</sub>, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
21. 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
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
25. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
27. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
31. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
32. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. If the engine is not fired on 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, 9.3.2] Federally Enforceable Through Title V Permit
35. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [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.

36. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
37. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
38. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
39. 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
40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. The engine's spark plugs shall be inspected every 1,440 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
44. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
46. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
47. 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] 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.

48. 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
49. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
50. Formerly permit number S-1548-378.
51. Formerly permit number S-3898-63.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-448-6

**EXPIRATION DATE:** 02/28/2018

**SECTION:** NW14 **TOWNSHIP:** 29S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:**

180 HP CATERPILLAR MODEL 343 NATURAL GAS-FIRED RICH BURN IC ENGINE SERVED BY A THREE WAY CATALYST AND AN AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR

## PERMIT UNIT REQUIREMENTS

---

1. This engine shall be equipped with and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a nonresettable elapsed time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
2. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
5. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. This IC engine is approved to operate at various unspecified locations within Vintage's light oil western stationary source. No IC engine shall operate within 240 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
7. The IC engine shall not operate within 1000' of K-12th grade school [CH&SC 42301.6]
8. Emissions rates from this engine shall not exceed any of the following limits: PM10: 0.16 g/bhp-hr; NOx (as NO2): 11 ppmvd @15% O2; VOC (as CH4): 138 ppmvd @15% O2; CO: 2000 ppmvd @15% O2; or SOx (as SO2): 0.01 g/bhp-hr. [District NSR Rule, 4701 and 4702] Federally Enforceable Through Title V Permit
9. Sampling ports consistent with EPA Reference Test Methods shall be provided in the exhaust stack. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Compliance with NOx, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

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

12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or EPA Method 100. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
18. 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
19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. 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 the performing the notification and testing required by this condition. [District Rules 4701 and 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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

22. 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit
23. 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 and quantity (cubic feet) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. Records shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
27. The engine's spark plugs shall be inspected every 1,440 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
28. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
29. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
30. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
31. 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] Federally Enforceable Through Title V Permit
32. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

33. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
34. Permittee shall maintain records for a period of five years and shall be made readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
35. Formerly S-1641-30.
36. Formerly S-382-769.
37. Facilities S-1216, S-382, and S-1738 constitute one stationary source. [District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1738-450-6

**EXPIRATION DATE:** 02/28/2018

**SECTION:** NW14 **TOWNSHIP:** 29S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:**

95 HP CATERPILLAR MODEL 3304 NATURAL GAS-FIRED RICH BURN IC ENGINE SERVED BY A THREE WAY CATALYST AND AN AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR

## PERMIT UNIT REQUIREMENTS

---

1. The permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
5. This IC engine is approved to operate at various unspecified locations within Vintage's light oil western stationary source. No IC engine shall operate within 240 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
6. The IC engine shall not operate within 1000' of K-12th grade school [CH&SC 42301.6]
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
8. The catalyst shall be equipped with an inlet and outlet temperature indicator. [District Rules 1070 and 4701] Federally Enforceable Through Title V Permit
9. Sampling ports consistent with EPA Reference Test Methods shall be provided at catalytic converter inlet and outlet streams. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Emissions rates shall not exceed any of the following limits: 0.16 g PM<sub>10</sub>/bhp-hr; 11 ppmvd NO<sub>x</sub> (as NO<sub>2</sub>) @15% O<sub>2</sub>; 250 ppmvd VOC (as CH<sub>4</sub>) @15% O<sub>2</sub>; 2000 ppmvd CO @15% O<sub>2</sub>; or 0.001 g SO<sub>x</sub> (as SO<sub>2</sub>)/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Compliance with NO<sub>x</sub>, CO and VOC emission limits shall be demonstrated through source testing every 24 months, except as provided below. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
12. Once all engines have been initially tested, compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701] 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. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, the type and quantity of fuel used, and maintenance or modifications performed. [District Rule 4701] Federally Enforceable Through Title V Permit
14. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701] Federally Enforceable Through Title V Permit
15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
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<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701] Federally Enforceable Through Title V Permit
19. 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 4701] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701] Federally Enforceable Through Title V Permit
21. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4701] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of 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 4701] 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.

23. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701] Federally Enforceable Through Title V Permit
24. By June 1, 2004, the owner or operator of an engine subject to the requirements of District Rule 4702 shall submit to the APCO an emission control plan pursuant to Section 6.1 of the rule. [District Rule 4702] Federally Enforceable Through Title V Permit
25. 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
26. 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
27. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
28. The engine's spark plugs shall be inspected every 1,440 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
29. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
30. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
31. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
32. 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] Federally Enforceable Through Title V Permit
33. 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
34. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
35. Formerly S-1641-33.
36. Formerly S-382-771.

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. Facilities S-1216, S-382, and S-1738 constitute one stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

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