San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

FEB 0 8 2012

Joseph Miller
West Kern Water District
PO Box 1105
Taft, CA 93268

**Re: Notice of Minor Title V Permit Modification**
**District Facility # S-353**
**Project # S-1120014**

Dear Mr. Miller:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-353-4-6 into the Title V operating permit. West Kern Water District is proposing to remove the activated carbon from the crankcase breather line equipped on permit unit S-353-4

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-353-4-6, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Enclosures

**San Joaquin Valley**
**AIR POLLUTION CONTROL DISTRICT**

**HEALTHY AIR LIVING™**

FEB 0 8 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**
**District Facility # S-353**
**Project # S-1120014**

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. West Kern Water District is proposing a Title V minor permit modification to incorporate the recently issued S-353-4-6 into the Title V operating permit. West Kern Water District is proposing to remove the activated carbon from the crankcase breather line equipped on permit unit S-353-4

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-353-4-6, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Enclosures

**Seyed Sadredin**
Executive Director/Air Pollution Control Officer

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

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

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

www.valleyair.org www.healthyairliving.com

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# TITLE V APPLICATION REVIEW

Minor Modification
Project #: 1120014

Engineer: John Yoshimura
Date: 2/1/12

Facility Number: S-353
Facility Name: West Kern Water District
Mailing Address: PO Box 1105
Taft, CA 93268

Contact Name: Joseph Miller
Phone: (661) 763-3151

Responsible Official: J.D. Brawley
Title: Director of Operations

---

## I. PROPOSAL

West Kern Water District is proposing a Title V minor permit modification to incorporate the recently issued S-353-4-6 into the Title V operating permit. The facility is proposing to remove the activated carbon from the crankcase breather line equipped on the engine.

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

## II. FACILITY LOCATION

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

## III. EQUIPMENT DESCRIPTION

S-353-4-7: 840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST (WELL 603)

## IV. SCOPE OF EPA AND PUBLIC REVIEW

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

## V. APPLICABLE REQUIREMENTS

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

## VI. DESCRIPTION OF PROPOSED MODIFICATIONS

West Kern Water District is proposing to remove the activated carbon from the crankcase breather line equipped on the engine.

S-353-4-7:

Permit conditions 1 through 34 on the current Permit to Operate (PTO) '-4-4 are represented by conditions 1 through 34 of the proposed PTO '-4-7.

Permit condition 36 on the current Permit to Operate (PTO) '-4-4 is represented by condition 35 of the proposed PTO '-4-7.

Permit condition 35 on the current Permit to Operate (PTO) '-4-4 was removed because it is no longer valid; the activated carbon has been removed from the crankcase breather line.

## VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;

a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and

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

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

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

## VIII. ATTACHMENTS

A. Proposed Modified Title V Operating Permit No. S-353-4-7
B. Authorities to Construct No. S-353-4-6
C. Emissions Increases
D. Application
E. Previous Title V Operating Permit No.'s S-353-4-4

# ATTACHMENT A

Proposed Modified Title V Operating Permit No.
(S-353-4-7)

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** S-353-4-7 **EXPIRATION DATE:** 10/31/2016

**SECTION:** SW 22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**
840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST (WELL 603)

## PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 4702 and 4801] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
10. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
11. NOx exhaust emissions shall be reduced by a minimum of 90% during initial tests and 80% thereafter across the control device, or shall not exceed 0.15 g/bhp-hr or 10.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rules 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

13. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit

14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

17. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit

24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit

25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit

26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit

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

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

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

30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit

32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit

33. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

35. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit

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# ATTACHMENT B

Authorities to Construct No.
(S-353-4-6)

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

# AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-353-4-6 **ISSUANCE DATE:** 10/31/2011

**LEGAL OWNER OR OPERATOR:** WEST KERN WATER DISTRICT
**MAILING ADDRESS:** PO BOX 1105
TAFT, CA 93268

**LOCATION:** WELL FIELD

**SECTION:** SW 22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603): REMOVE ACTIVATED CARBON FROM CRANKCASE BREATHER LINE

## CONDITIONS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 4702 and 4801] Federally Enforceable Through Title V Permit
4. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 DC volts as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S353-4-6 : Oct 31 2011 10:52AM – GARCIAJ : Joint Inspection NOT Required

7. NOx exhaust emissions shall be reduced by a minimum of 90% during initial tests and 80% thereafter across the control device, or shall not exceed 0.15 g/bhp-hr or 10.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rules 4702] Federally Enforceable Through Title V Permit

8. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

9. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

11. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit

12. 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

13. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

14. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]

15. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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

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

CONDITIONS CONTINUE ON NEXT PAGE

19. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

21. The permittee shall monitor and record the crankcase breather vent line stack concentration of VOCs on a quarterly basis using a portable analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit

22. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

23. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained at the West Kern Water District office for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

26. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit

27. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit

28. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit

29. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

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

31. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

CONDITIONS CONTINUE ON NEXT PAGE

33. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit

# ATTACHMENT C

## Emissions Increases

| | SSIPE (lb/yr) | | | | |
|---|---|---|---|---|---|
| | NOx | VOC | CO | SOx | PM10 |
| S-353-4-7 | 0 | -183 | 0 | 0 | 0 |
| **TOTAL** | **0** | **-183** | **0** | **0** | **0** |

# ATTACHMENT D

Application

RECEIVED

APR 21 2011

SJVAPCD
Southern Region

# San Joaquin Valley
# Unified Air Pollution Control District

## TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

### I. TYPE OF PERMIT ACTION (Check appropriate box)

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

| | |
|---|---|
| COMPANY NAME: West Kern Water District | FACILITY ID: S -353 |
| 1. Type of Organization:[ ] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [X] Utility | |
| 2. Owner's Name: West Kern Water District | |
| 3. Agent to the Owner: | |

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

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

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

Signature of Responsible Official

April 18, 2011
Date

JD Bramlet
J.D. BRAMLET
Name of Responsible Official (please print)

Director of Operations
Title of Responsible Official (please print)

**Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-5900 * FAX (559) 230-6061**

# ATTACHMENT E

Previous Title V Operating Permit
No.'s S-353-4-4

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** S-353-4-4 **EXPIRATION DATE:** 10/31/2016

**SECTION:** SW 22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**
840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603)

## PERMIT UNIT REQUIREMENTS

1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 4702 and 4801] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
10. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
11. NOx exhaust emissions shall be reduced by a minimum of 90% during initial tests and 80% thereafter across the control device, or shall not exceed 0.15 g/bhp-hr or 10.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes; VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rules 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

13. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit

14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

17. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit

24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit

25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit

26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit

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

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

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

30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit

32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit

33. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

35. The permittee shall monitor and record the crankcase breather vent line stack concentration of VOCs on a quarterly basis using a portable analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit

36. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit