



OCT 10 2013

Mr. Raymond Rodriguez  
Occidental of Elk Hills Inc  
PO Box 1001  
Tupman, CA 93276

**Re: Notice of Minor Title V Permit Modification**  
**District Facility # S-1216**  
**Project # 1133810**

Dear Mr. Rodriguez:

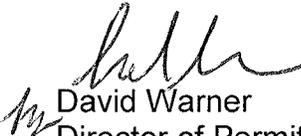
Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authority to Construct (ATC) S-1216-71-2 into the Title V operating permit. The ATC authorized addition of NESHAP Subpart ZZZZ provisions to the permit.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authority to Construct (ATC) S-1216-71-2, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

  
David Warner  
Director of Permit Services

Enclosures

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

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

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

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

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

# TITLE V APPLICATION REVIEW

Minor Modification  
Project #: S-1133810

Engineer: Richard Edgehill  
Date: October 9, 2013

Facility Number: S-1216  
Facility Name: Occidental of Elk Hills Inc  
Mailing Address: PO Box 1001  
Tupman, CA 93276

Contact Name: Raymond Rodriguez  
Phone: (661) 763-5961  
Title: Sr Environmental Engineer

Responsible Official: Mike Glavin  
Lead Engineer: Allan Phillips *AP SUPERVISE*

## I. PROPOSAL

OCT 10 2013

Occidental of Elk Hills Inc (OEHI) is proposing a Title V minor permit modification to incorporate the recently issued Authorities to Construct (ATC) S-1216-71-2 for an IC engine into the Title V permit. The ATC authorizes addition of NESHAP Subpart ZZZZ provisions to the permit.

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 IC engine is authorized to operate at NW Section 25, T30S, R22E in the light oil production stationary source in the western Kern County fields.

## III. EQUIPMENT DESCRIPTION

S-1216-71-3: 1478 HP WAUKESHA MODEL L7042GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION AND AUTOMATIC AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR

#### 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

A condition match between draft PTO and current PTO is provided below.

'-71

Draft PTO	Current PTO	Comments
1-31	1-31	
32-42		Subpart ZZZZ
43		Recordkeeping
44,45	32,33	

#### 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**

- I. Proposed Modified Title V Operating Permit
- II. Authority to Construct
- III. Application
- IV. Previous Title V Operating Permit

## Attachment A

### Proposed Modified Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1216-71-3

**EXPIRATION DATE:** 08/31/2016

**SECTION:** NW25 **TOWNSHIP:** 30S **RANGE:** 22E

**EQUIPMENT DESCRIPTION:**

1478 HP WAUKESHA MODEL L7042GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION AND AUTOMATIC AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The emission concentration shall not exceed 5 ppmvd @ 15% O2 for NOx, 56 ppmvd @ 15%O2 for CO, and 25 ppmvd, as methane, @ 15% O2 for VOC. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
3. The PM10 emissions shall not exceed 0.02 g/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The SOx emissions shall not exceed 2.85 lbs/MMscf of natural gas used. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate from fugitive emissions components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. There shall be no leaks in excess of 10,000 ppmv measured pursuant to EPA Method 21 from fugitive emissions components associated with this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) for <10,000 ppmv (no leaks). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Engine shall be equipped with nonresettable fuel and hourly meters. [District Rule 4702] Federally Enforceable Through Title V Permit
9. The engine shall be equipped with an automatic air to fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Source testing of the NOx, CO and VOC emission concentrations shall be conducted at least once every 12 months. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
11. Source testing for NOx emissions shall be conducted utilizing CARB 100 or EPA method 7E. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
12. Source testing for CO emissions shall be conducted utilizing CARB 100 or EPA method 10. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing for VOC emissions shall be conducted utilizing EPA method 25 or EPA method 18, referenced as methane. [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.

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 Rules 1081] Federally Enforceable Through Title V Permit
15. The results of each source test must be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
17. 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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
18. 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 performing the notification and testing required by this condition. [District Rules 4701, 4702, and 40 CFR Part 64] 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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
20. 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, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
21. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070 and 4702] Federally Enforceable Through Title V Permit
22. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
23. {2434} 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
24. {2435} 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 D 1072, D 3031, D 4084 or D 3246. [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.

25. {2436} 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. The engine shall be operated such that the O2 sensor output voltage is within 0.1 volts DC - 0.9 volts DC to meet the air/fuel ratio setting. [40 CFR 64.3] Federally Enforceable Through Title V Permit
27. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
28. The O2 sensor output voltage range shall be correlated to the NOx emissions limit during source testing and shall be adjusted when necessary based on the results of the source test. [40 CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
30. Any excursion from the O2 sensor output voltage shall be investigated and corrective action taken to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. An excursion is defined as any alarm event triggered by the engine air/fuel ratio controller. [40 CFR 64.7] Federally Enforceable Through Title V Permit
31. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
32. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
33. 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
34. IC engine shall only be operated in a sparsely populated area as defined by 40 CFR Part 63, Subpart ZZZZ. Permittee shall conduct a review of the surrounding area every 12 months to determine if nearby population has changed. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
35. The permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
36. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
39. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 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.

41. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. 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 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. 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
43. 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 Subpart ZZZZ]] Federally Enforceable Through Title V Permit
44. Formerly S-3507-17.
45. Formerly S-382-805.

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

DRAFT

Attachment B  
Authority to Construct

# AUTHORITY TO CONSTRUCT

PERMIT NO: S-1216-71-2

ISSUANCE DATE: 05/08/2013

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC

MAILING ADDRESS: ATTN: DENNIS CHAMPION  
PO BOX 1001  
TUPMAN, CA 93276

LOCATION: LIGHT OIL WESTERN

SECTION: NW25 TOWNSHIP: 30S RANGE: 22E

## EQUIPMENT DESCRIPTION:

MODIFICATION OF 1478 HP WAUKESHA MODEL L7042GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION AND AUTOMATIC AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR: ADD SUBPART ZZZZ CONDITIONS

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The emission concentration shall not exceed 5 ppmvd @ 15% O2 for NOx, 56 ppmvd @ 15%O2 for CO, and 25 ppmvd, as methane, @ 15% O2 for VOC. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
4. The PM10 emissions shall not exceed 0.02 g/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The SOx emissions shall not exceed 2.85 lbs/MMscf of natural gas used. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emission rate from fugitive emissions components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-1216-71-2 : Oct 9 2013 2:10PM - EDGEHILL : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. There shall be no leaks in excess of 10,000 ppmv measured pursuant to EPA Method 21 from fugitive emissions components associated with this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) for <10,000 ppmv (no leaks). [District NSR Rule] Federally Enforceable Through Title V Permit
9. Engine shall be equipped with nonresettable fuel and hourly meters. [District Rule 4702] Federally Enforceable Through Title V Permit
10. The engine shall be equipped with an automatic air to fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing of the NOx, CO and VOC emission concentrations shall be conducted within 60 days of initial startup and at least once every 12 months thereafter. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
12. Source testing for NOx emissions shall be conducted utilizing CARB 100 or EPA method 7E. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing for CO emissions shall be conducted utilizing CARB 100 or EPA method 10. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
14. Source testing for VOC emissions shall be conducted utilizing EPA method 25 or EPA method 18, referenced as methane. [District Rule 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 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081] Federally Enforceable Through Title V Permit
16. The results of each source test must be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 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 O2 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 Rules 4701, 4702, and 40 CFR Part 64] 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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
21. 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, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070 and 4702] Federally Enforceable Through Title V Permit
23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
24. If the 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
25. 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 D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. 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
27. The engine shall be operated such that the O<sub>2</sub> sensor output voltage is within 0.1 volts DC - 0.9 volts DC to meet the air/fuel ratio setting. [40 CFR 64.3] Federally Enforceable Through Title V Permit
28. The permittee shall record the O<sub>2</sub> sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
29. The O<sub>2</sub> sensor output voltage range shall be correlated to the NO<sub>x</sub> emissions limit during source testing and shall be adjusted when necessary based on the results of the source test. [40 CFR 64] Federally Enforceable Through Title V Permit
30. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
31. Any excursion from the O<sub>2</sub> sensor output voltage shall be investigated and corrective action taken to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. An excursion is defined as any alarm event triggered by the engine air/fuel ratio controller. [40 CFR 64.7] Federally Enforceable Through Title V Permit
32. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
33. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
34. Formerly S-3507-17.
35. Formerly S-382-805.

CONDITIONS CONTINUE ON NEXT PAGE

36. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
37. On and after October 19, 2013, IC engine shall only be operated in a sparsely populated area as defined by 40 CFR Part 63, Subpart ZZZZ. Permittee shall conduct a review of the surrounding area every 12 months to determine if nearby population has changed. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
38. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
39. On and after October 19, 2013, the engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
40. On and after October 19, 2013, the engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
41. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
42. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
43. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
44. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
45. On and after October 19, 2013, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. 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
46. 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 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Attachment C  
Application

5-1216-71-3

# San Joaquin Valley Air Pollution Control District

[www.valleyair.org](http://www.valleyair.org)

RECEIVED

## Permit Application For:

SEP 30 2013

ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION     SIGNIFICANT MODIFICATION

SJVAPCD  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

1. PERMIT TO BE ISSUED TO: <p style="text-align: center;">Occidental of Elk Hills, Inc</p>	
2. MAILING ADDRESS:  STREET/P.O. BOX: <u>PO Box 1001</u>  CITY: <u>Tupman</u> STATE: <u>CA</u> 9-DIGIT ZIP CODE: <u>93276</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:  STREET: <u>Elk Hills</u> CITY: <u>Tupman</u>  _____ ¼ SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Oil and Natural Gas Production	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)  Incorporate the following ATCs into S-1216 Title V Permit:  S-1216-71-2	
6. TYPE OR PRINT NAME OF APPLICANT: <p style="text-align: center;">Raymond Rodriguez</p>	TITLE OF APPLICANT: <p style="text-align: center;">Sr. Environmental Advisor</p>
7. SIGNATURE OF APPLICANT: 	DATE: <u>9/27/2013</u>  PHONE: (661) 763-5961 FAX: EMAIL: <u>Raymond_rodriguez@oxy.com</u>

### For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>S-1133810</u> FACILITY ID: <u>S-1216</u>

# San Joaquin Valley Unified Air Pollution Control District

## TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

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

- SIGNIFICANT PERMIT MODIFICATION                       ADMINISTRATIVE AMENDMENT  
 MINOR PERMIT MODIFICATION

COMPANY NAME: Occidental of Elk Hills, Inc	FACILITY ID: S - 1216
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Occidental of Elk Hills, Inc	
3. Agent to the Owner: Occidental of Elk Hills, Inc.	

**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

Mike Glavin

\_\_\_\_\_  
Name of Responsible Official (please print)

Environmental Team Leader

\_\_\_\_\_  
Title of Responsible Official (please print)

07-27-13

Date

Attachment D  
Previous Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1216-71-1

**EXPIRATION DATE:** 08/31/2016

**SECTION:** NW25 **TOWNSHIP:** 30S **RANGE:** 22E

**EQUIPMENT DESCRIPTION:**

1478 HP WAUKESHA MODEL L7042GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION AND AUTOMATIC AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The emission concentration shall not exceed 5 ppmvd @ 15% O2 for NOx, 56 ppmvd @ 15%O2 for CO, and 25 ppmvd, as methane, @ 15% O2 for VOC. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
3. The PM10 emissions shall not exceed 0.02 g/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The SOx emissions shall not exceed 2.85 lbs/MMscf of natural gas used. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate from fugitive emissions components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. There shall be no leaks in excess of 10,000 ppmv measured pursuant to EPA Method 21 from fugitive emissions components associated with this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) for <10,000 ppmv (no leaks). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Engine shall be equipped with nonresettable fuel and hourly meters. [District Rule 4702] Federally Enforceable Through Title V Permit
9. The engine shall be equipped with an automatic air to fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Source testing of the NOx, CO and VOC emission concentrations shall be conducted within 60 days of initial startup and at least once every 12 months thereafter. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
11. Source testing for NOx emissions shall be conducted utilizing CARB 100 or EPA method 7E. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
12. Source testing for CO emissions shall be conducted utilizing CARB 100 or EPA method 10. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing for VOC emissions shall be conducted utilizing EPA method 25 or EPA method 18, referenced as methane. [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.

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 Rules 1081] Federally Enforceable Through Title V Permit
15. The results of each source test must be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
17. 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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
18. 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 performing the notification and testing required by this condition. [District Rules 4701, 4702, and 40 CFR Part 64] 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 Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
20. 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, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
21. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070 and 4702] Federally Enforceable Through Title V Permit
22. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
23. If the 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
24. 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 D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. 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. The engine shall be operated such that the O2 sensor output voltage is within 0.1 volts DC - 0.9 volts DC to meet the air/fuel ratio setting. [40 CFR 64.3] Federally Enforceable Through Title V Permit
27. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
28. The O2 sensor output voltage range shall be correlated to the NOx emissions limit during source testing and shall be adjusted when necessary based on the results of the source test. [40 CFR 64] Federally Enforceable Through Title V Permit
29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
30. Any excursion from the O2 sensor output voltage shall be investigated and corrective action taken to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. An excursion is defined as any alarm event triggered by the engine air/fuel ratio controller. [40 CFR 64.7] Federally Enforceable Through Title V Permit
31. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
32. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
33. Formerly S-3507-17.
34. Formerly S-382-805.

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