



JUN 04 2015

Mr. Raymond Rodriguez  
California Resources Elk Hills, LLC  
PO Box 1001  
Bakersfield, CA 93276

**Re: Notice of Minor Title V Permit Modification**  
**District Facility # S-2234**  
**Project # 1150724**

Dear Mr. Rodriguez:

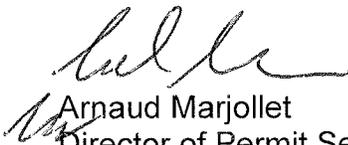
Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-2234-135-6 (under project 1143765) into the Title V operating permit. The ATC is to replace an IC engine's daily fuel use limit with an annual fuel use limit.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-2234-135-6, 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.

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,



Arnaud Marjollet  
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-1150724

Engineer: David Torii  
Reviewing Engineer: Rich Karrs

RWK 6-3-15

Facility Number: S-2234  
Facility Name: California Resources Elk Hills, LLC  
Mailing Address: PO Box 1001  
Bakersfield, CA 93276

Contact Name: Raymond Rodriguez  
Phone: 661-763-6159

Responsible Official: George Gough  
Title: HSE Manager

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## I. PROPOSAL

California Resources Elk Hills, LLC (CREH) is proposing a Title V minor permit modification to incorporate ATC S-2234-135-6 into their Title V operating permit. The ATC is to replace an IC engines' daily fuel use limit with an annual fuel use limit.

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 equipment will be authorized to operate at various unspecified locations in facility S-2234.

## III. EQUIPMENT DESCRIPTION

S-2234-135-7: 1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

## 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**

The Changes in the original Permit to Operate and the implemented ATC are as follows

<b>Current PTO#</b>	<b>Condition # on current PTO</b>	<b>Condition is New, Modified, or Removed</b>	<b>Reason for Change from Current PTO</b>
S-2234-135-7	15	Condition #15 revised	Daily fuel use limit replaced by annual fuel use limit

**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.

Attachments:

- Attachment A: Proposed Modified Title V Operating Permit
- Attachment B: Authorities To Construct
- Attachment C: Emissions Increases
- Attachment D: Previous Title V Operating Permit
- Attachment E: Application

# ATTACHMENT A

Proposed Modified Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-135-7

**EXPIRATION DATE:** 10/31/2016

**SECTION:** 29 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

## PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emissions from this IC engine shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5 ppmv @ 15% O<sub>2</sub>, VOC - 25 ppmv @ 15% O<sub>2</sub>, CO - 56 ppmv @ 15% O<sub>2</sub>, PM<sub>10</sub> - 0.02 g/hp-hr, or SO<sub>x</sub> (as SO<sub>2</sub>) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] 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. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The fuel consumption limit for this engine shall not exceed 88.184 MMscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The engine shall only burn natural gas with fuel gas sulfur concentration (as H<sub>2</sub>S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on non-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, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit
19. If the engine is fired on non-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 2201] Federally Enforceable Through Title V Permit
20. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
21. Source testing to measure the stack NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
22. 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, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans, and EPA Method 21 for fugitive components. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO<sub>x</sub>, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
28. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] 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.

29. 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, 6.5.9] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub>, 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
31. 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 Rule 4702] Federally Enforceable Through Title V Permit
32. 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
33. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070] Federally Enforceable Through Title V Permit
35. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
36. 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, quantity (cubic feet of gas or gallons of liquid) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

# ATTACHMENT B

## Authorities to Construct



## AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-135-6

ISSUANCE DATE: 10/15/2014

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC  
MAILING ADDRESS: ATTN: DENNIS CHAMPION  
PO BOX 1001  
TUPMAN, CA 93276

LOCATION: GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

SECTION: 29 TOWNSHIP: 30S RANGE: 23E

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: REMOVE DAILY FUEL USE LIMIT AND ADD ANNUAL FUEL USE LIMIT

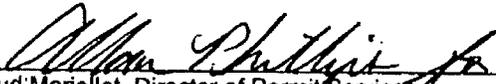
## CONDITIONS

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. ATC S-2234-35-4 shall be implemented prior to or concurrently with this ATC. [District Rule]
3. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
5. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] 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

  
Arnaud Marjollat, Director of Permit Services  
S-2234-135-6; Oct 15 2014 7:08AM - TORID : Joint Inspection Required with TOC60

7. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
12. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5 ppmv @ 15% O<sub>2</sub>, VOC - 25 ppmv @ 15% O<sub>2</sub>, CO - 56 ppmv @ 15% O<sub>2</sub>, PM<sub>10</sub> - 0.02 g/hp-hr, or SO<sub>x</sub> (as SO<sub>2</sub>) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The fuel consumption limit for this engine shall not exceed 88.184 MMscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The engine shall only burn natural gas with fuel gas sulfur concentration (as H<sub>2</sub>S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
20. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the engine is fired on non-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, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on non-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 2201] Federally Enforceable Through Title V Permit
23. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
24. Source testing to measure the stack NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans, and EPA Method 21 for fugitive components. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO<sub>x</sub>, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] 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, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub>, 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
34. 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 Rule 4702] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

35. 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
36. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070] Federally Enforceable Through Title V Permit
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
39. 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, quantity (cubic feet of gas or gallons of liquid) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

# ATTACHMENT C

## Emissions Increases

SSIPE (lb/yr)				
NOx	VOC	CO	SOx	PM10
0	0	0	0	0

# ATTACHMENT D

## Previous Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-135-5

**EXPIRATION DATE:** 10/31/2016

**SECTION:** 29 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

## PERMIT UNIT REQUIREMENTS

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1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emissions from this IC engine shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5 ppmv @ 15% O<sub>2</sub>, VOC - 25 ppmv @ 15% O<sub>2</sub>, CO - 56 ppmv @ 15% O<sub>2</sub>, PM<sub>10</sub> - 0.02 g/hp-hr, or SO<sub>x</sub> (as SO<sub>2</sub>) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] 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. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The engine shall only burn natural gas with fuel gas sulfur concentration (as H<sub>2</sub>S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on non-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, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit
19. If the engine is fired on non-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 2201] Federally Enforceable Through Title V Permit
20. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
21. Source testing to measure the stack NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
22. 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, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100, ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans, and EPA Method 21 for fugitive components. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO<sub>x</sub>, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
28. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] 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.

29. 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, 6.5.9] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub>, 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
31. 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 Rule 4702] Federally Enforceable Through Title V Permit
32. 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
33. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070] Federally Enforceable Through Title V Permit
35. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
36. 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, quantity (cubic feet of gas or gallons of liquid) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

# ATTACHMENT E

## Application



OCCIDENTAL OF ELK HILLS, INC.  
 P. O. Box 1001, 28590 Highway 119, Tupman, California 93276  
 Telephone 661-763-6000

RECEIVED  
 OCT 22 2014  
 SJVAPCD  
 Southern Region

Submitted via email

October 22, 2014

Mr. Leonard Scandura  
 Permit Services Manager  
 San Joaquin Valley APCD – Southern Region  
 34946 Flyover Court  
 Bakersfield, CA 93308

Subject: Minor Modification to Occidental of Elk Hills, Inc.  
 Title V Permit (S-2234)

Dear Mr. Scandura:

Occidental of Elk Hills, Inc. (OEHI) requests District approval for an Minor Modification of facility S-2234 Title V Permit to include the below listed Authorities to Construct:

S-2234-126	S-2234-130	S-2234-132	S-2234-134	S-2234-136
S-2234-129	S-2234-131	S-2234-133	S-2234-135	S-2234-137

Please bill OEHI for all administrative costs associated with this request. If you have any questions or require addition information concerning this issue, please contact me directly at (661) 763-5961 or on my cellular phone at (661) 204-9236.

Sincerely,

Raymond Rodriguez  
 Environmental Consultant  
 Occidental of Elk Hills, Inc.

S-2234-135-6 PROCESSING IN  
 1150724

cc: Richard F. Garcia, OEHI  
 Kevin Madry, ERM

RECEIVED

# San Joaquin Valley Air Pollution Control District

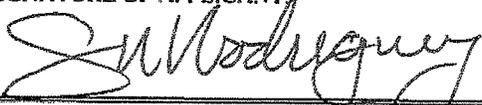
OCT 22 2014

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

SJVAPCD  
Southern Region

## Permit Application For:

ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION     SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: <p style="text-align: center;">Occidental of Elk Hills, Inc</p>											
2. MAILING ADDRESS:  STREET/P.O. BOX      PO Box 1001, 28590 Hwy 119  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>  ____ 1/4 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 ATC into S-2234 Title V Permit:											
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td>S-2234-126</td> <td>S-2234-130</td> <td>S-2234-132</td> <td>S-2234-134</td> <td>S-2234-136</td> </tr> <tr> <td>S-2234-129</td> <td>S-2234-131</td> <td>S-2234-133</td> <td>S-2234-135</td> <td>S-2234-137</td> </tr> </table>		S-2234-126	S-2234-130	S-2234-132	S-2234-134	S-2234-136	S-2234-129	S-2234-131	S-2234-133	S-2234-135	S-2234-137
S-2234-126	S-2234-130	S-2234-132	S-2234-134	S-2234-136							
S-2234-129	S-2234-131	S-2234-133	S-2234-135	S-2234-137							
6. TYPE OR PRINT NAME OF APPLICANT: <p style="text-align: center;">Raymond Rodriguez</p>	TITLE OF APPLICANT: <p style="text-align: center;">Environmental Consultant</p>										
7. SIGNATURE OF APPLICANT: 	DATE: <u>10/22/2014</u>  PHONE: (661) 763-6159 FAX: (661) 763-6681 EMAIL: Raymond_rodriguez@oxy.com										

For APCD Use Only: NO \$

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>S-1144038</u> FACILITY ID: <u>S-2234</u>

1150724

RECEIVED  
OCT 22 2014  
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                       ADMINISTRATIVE AMENDMENT  
 MINOR PERMIT MODIFICATION

COMPANY NAME: Occidental of Elk Hills, Inc	FACILITY ID: S - 2234
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

10/22/14  
\_\_\_\_\_  
Date

George Gough  
\_\_\_\_\_  
Name of Responsible Official (please print)  
  
Health, Safety and Environment Manager  
\_\_\_\_\_  
Title of Responsible Official (please print)