



DEC 2 8 2017

Mr. Zachary Dransoff California Resources Production Corp 11109 River Run Blvd Bakersfield, CA 93311

Re: Notice of Preliminary Decision - Title V Permit Renewal

Facility Number: S-8454 **Project Number: S-1173339** 

Dear Mr. Dransoff:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for California Resources Production Corp at Kern County Light Oil Central stationary source, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

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

Sincerely

rnaud Mariollet

Director of Permit Services

**Enclosures** 

Tung Le, CARB (w/enclosure) via email CC:

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

Seved Sadredin

Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

# Proposed Title V Permit Renewal Evaluation California Resources Production Corp S-8454

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# TITLE V PERMIT RENEWAL EVALUATION

# **Light Oil Production Operation**

Engineer: Homero Ramirez

Date: December 18, 2017

Facility Number: S-8454

Facility Name: California Resources Production Corp

Mailing Address: 11109 River Run Blvd

Bakersfield, CA 93311

Contact Name: Zachary Dransoff, HSE Advisor

Phone: (661) 332-6294

Responsible Official: Jim Robinson

Title: Vice President, HSE

**Project #:** S-1173339

Deemed Complete: October 11, 2017

#### I. PROPOSAL

California Resources Production Corp (S-8454) was first issued a Title V Permit in October 2008 when its first permits were transferred to S-1738<sup>1</sup>, which already had a Title V permit. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V Permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the last renewal of the Title V Permit, which occurred on January 14, 2014 (when it was part of S-1738).

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

<sup>&</sup>lt;sup>1</sup> The earliest-issued permits that are now under S-8454 were first issued a Title V permit in October 2008 when permits were transferred from Gotland Oil to Vintage Production California (S-1738). In December 2014, the permits that constitute facility S-8454 were transferred from facility S-1738. Note that facilities S-1216, S-382, S-1738, S-8282, and S-8454 constitute one stationary source but are assigned separate facilities for business purposes.

### II. FACILITY LOCATION

The facility is located in the Light Oil Central stationary source in Kern County, CA.

### III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

#### IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

#### V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

# VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### A. Rules Updated Since January 14, 2014

- District Rule 2020, <u>Exemptions</u> (Amended December 18, 2014)
- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (Amended February 18, 2016)

- 40 CFR Part 63 Subpart DDDDD, <u>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</u>
  (Amended November 20, 2015)
- 40 CFR Part 82 Subpart B, <u>Stratospheric Ozone</u> (Amended June 25, 2013)
- 40 CFR Part 82 Subpart F, <u>Stratospheric Ozone</u> (Amended June 25, 2013)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring</u>

#### B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

# C. Rules Added Since January 14, 2014

There are no applicable rules that have been added since the last Title V renewal.

## D. Rules Not Updated Since January 14, 2014

- District Rule 1070, <u>Inspections</u> (Amended December 17, 1992)
- District Rule 1080, <u>Stack Monitoring</u> (Amended December 17, 1992)
- District Rule 1081, <u>Source Sampling</u> (Amended December 17, 1992)
- District Rule 1100, <u>Equipment Breakdown</u> (Amended December 17, 1992)
- District Rule 1160, <u>Emission Statements</u> (Amended November 18, 1992)
- District Rule 2010, <u>Permits Required</u> (Amended December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u> (Amended December 17, 1992)

- District Rule 2040, <u>Applications</u> (Amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (Amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (Amended December 17, 1992)
- District Rule 2410, <u>Prevention of Significant Deterioration</u> (Adopted June 16, 2011, Effective November 26, 2012)
- District Rule 2250, <u>Permit Exempt Equipment Registration</u> (Amended October 19, 2006)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (Amended June 21, 2001)
- District Rule 4002, <u>National Emissions Standards for Hazardous Air Pollutants</u>
   (Amended May 20, 2004)
- District Rule 4101, <u>Visible Emissions</u> (Amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (Amended December 17, 1992)
- District Rule 4301, <u>Fuel Burning Equipment</u> (Amended December 17, 1992)
- District Rule 4305, <u>Boilers, Steam Generators, and Process Heaters—Phase 2</u>
  (Amended August 21, 2003)
- District Rule 4306, <u>Boilers, Steam Generators and Process Heaters Phase 3</u>
  (Amended October 16, 2008)
- District Rule 4311, <u>Flares</u> (Amended June 18, 2009)

- District Rule 4320, <u>Advanced Emissions Reduction Options for Boiler</u>, <u>Steam Generators</u>, and <u>Process Heaters Greater Than 5.0 MMBtu/hr</u> (Adopted October 16, 2008)
- District Rule 4351, <u>Boilers Steam Generators</u>, and <u>Process Heaters</u> <u>Phase 1</u> (Amended August 21, 2003)
- District Rule 4601, <u>Architectural Coatings</u> (Amended December 17, 2009)
- District Rule 4623, Storage of Organic Liquids (Amended May 19, 2005)
- District Rule 4801, <u>Sulfur Compounds</u> (Amended December 17, 1992)
- District Rule 8011, <u>Fugitive Dust General Requirements</u> (Amended August 19, 2004)
- District Rule 8021, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Construction, Demolition, Excavation, and Extraction Activities</u>
   (Amended August 19, 2004)
- District Rule 8031, <u>Fugitive Dust Requirements for Control of Fine</u>
   <u>Particulate Matter (PM10) from Handling and Storage of Bulk Materials</u>
   (Amended August 19, 2004)
- District Rule 8041, <u>Fugitive Dust Requirements for Control of Fine</u> <u>Particulate Matter (PM10) from Carryout and Trackout</u> (Amended August 19, 2004)
- District Rule 8051, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Open Area</u>
  (Amended August 19, 2004)
- District Rule 8061, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Paved and Unpaved Roads</u> (Amended August 19, 2004)
- District Rule 8071, <u>Fugitive Dust Requirements for Control of Fine</u>
   <u>Particulate Matter (PM10) from Unpaved Vehicle/Equipment Areas</u>
   (Amended September 16, 2004)

- 40 CFR Part 60 Subpart Dc, <u>Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</u> (Amended February 16, 2012)
- 40 CFR Part 60 Subpart K, <u>Standards of Performance for Storage</u>
   <u>Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978</u>
   (Amended October 17, 2000)
- 40 CFR Part 60 Subpart Ka, <u>Standards of Performance for Storage</u>
   <u>Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984</u>
   (Amended December 14, 2000)
- 40 CFR Part 60 Subpart Kb, <u>Standards of Performance for Volatile</u>
   Organic Liquid Storage Vessels (Including Petroleum Liquid Storage
   Vessels) for Which Construction, Reconstruction, or Modification
   Commenced After July 23, 1984
   (Amended October 15, 2003)
- 40 CFR Part 61 Subpart M, <u>National Emission Standard for Asbestos</u> (Amended July 20, 2004)
- 40 CFR Part 63, Subpart HH, <u>National Emissions Standards for Hazardous Air Pollutants From Oil And Natural Gas Production Facilities</u>
  (Amended August 16, 2012)

# VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains both the federally enforceable requirements as well as District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V Permit are designated as "Federally Enforceable through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

### A. Rules Added/Updated

None

## B. Rules Not Updated

District Rule 4102, Nuisance (as amended December 17, 1992)

#### a. S-8454-0

Condition #42 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

#### b. S-8454-20

Conditions #3 and 8 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

### c. S-8454-21

Conditions #3 and 8 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

### VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this section will address rules and permit conditions that have been amended or added since the issuance of the initial Title V Permit or most recent renewal of the Title V permit.

### A. District Rule 2020, Exemptions

District Rule 2020 lists equipment that is exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

# B. District Rule 2201, New and Modified Stationary Source Review (NSR) Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

Please note that the conditions described below for steam generator permits S-8454-20 and -21 have been revised to remove reference to certain permits or Authorities to Construct that have been cancelled. Permits associated with facility S-8567 were cancelled on 9/29/16, and Authorities to Construct S-1738-494 and -495 were cancelled on 8/30/16. Therefore, the following conditions will be revised as shown below:

### S-8454-20 conditions #1 and 2:

- This unit is permitted as S-1326-443, S-1327-210, S-8567-2 and S-8454-20 and is approved to operate in California Resources Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201]
- This unit shall only use public utility supplied power or IC engine powered electrical generators S-1738-494 and '495 for its electrical needs. [District Rule 2201]

## S-8454-21 conditions #1 and 2:

- This unit is permitted as S-1326-435, S-1327-208, S-8567-3 and S-8454-21 and is approved to operate in California Resources Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201]
- This unit shall only use public utility supplied power or IC engine powered electrical generators S-1738-494 and '495 for its electrical needs. [District Rule 2201]

# C. 40 CFR Part 63, Subpart DDDDD, <u>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</u>

This subpart applies to major HAP sources as defined in either 40 CFR 63.2 or 63.761.

A major HAP Source is defined in 40 CFR Part 63.2 as a source emitting hazardous pollutants (as defined in 112b) in excess of 10 tons per year of any hazardous air pollutant or 25 tons per year of any combination of hazardous air pollutants.

40 CFR 63.761 defines a Major Source as the same as in Section 63.2 except that, for production field facilities only HAP emissions from glycol dehydration units and storage vessels with the potential for flash emissions shall be aggregated for a major source determination.

The facility does not have the potential to emit from neither glycol dehydration units nor storage vessels, whose potential to emit are from flash

emissions are from Rule 4623-exempt front-line tanks. Therefore, these requirements do not apply.

# D. 40 CFR Part 82, Subparts B and F, <u>Stratospheric Ozone</u>

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2013, and conditions 27 and 28 of S-8454-0-2 assure compliance with the requirements.

## E. 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

40 CFR Part 64 requires Compliance Assurance Monitoring for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

Pollutant	Major Source Threshold (lb/year)
NOx	20,000
SOx	140,000
PM <sub>10</sub>	140,000
CO	200,000
VOC	20,000

§64.1 defines a control device as equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

The only units at the facility with add-on controls and emission limits for the controlled pollutants are steam generators S-8454-20 and -21, which are equipped with flue gas recirculation.

25 MMBtu/hr Steam Generators with Flue Gas Recirculation (S-8454-20 and -21):

The 25 MMBtu/hr steam generators S-8454-20 and -21 are equipped with a low NOx burner and flue gas recirculation. CAM would be required if the pre-FGR emissions are greater than the CAM threshold. To assess whether

CAM is triggered, an emissions factor must be used that corresponds to the use of a Low-NOx burner prior to the addition control provided by the FGR.

The emission factor for these steam generators is derived from emission factors for combustion controlled by the low NOx burner and for combustion by the low NOx burner plus FGR as listed in the AP-42 Table 1.4-1. These emissions factors from AP-42 Table 1.4-1for small boilers < 100 MMBtu/hr are shown below:

	Emission Factor (lb/MMscf)
Uncontrolled	100
Controlled – Low NOx burners	50
Controlled – Low NOx burners,	32
Flue gas recirculation	

Using these emission factors, the control efficiency of added FGR and corresponding emission factors are calculated as:

FGR control efficiency: 
$$100 \times (50 - 32) / 50 = 36\%$$

These steam generators are currently operating in compliance with their permitted NOx emission limit of 0.008 lb/MMBtu. Therefore, the pre-FGR emission factor is calculated as follows:

Pre-FGR emission factor: 
$$0.008 \text{ lb-NOx/MMBtu} / (1 - 0.36)$$
  
=  $0.0125 \text{ lb-NOx/MMBtu}$ 

Accordingly, the pre "add-on control" emissions are:

$$(0.0125 \text{ lb-NOx/MMBtu})(25 \text{ MMBtu/hr})(8760 \text{ hr/yr})(\text{ton/2000 lb})$$
  
= 1.37 tons/yr < 10 tons/yr.

The results of the calculation show that steam generators S-8454-20 and -21 are below the CAM applicability threshold. Therefore, CAM for the units is not required.

# IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

# A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any additional model general permit templates.

### B. Obsolete Permit Shields From Existing Permit Requirements

No obsolete permit shields were removed from permit as a result of amended rules.

### X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

## XI. PERMIT CONDITIONS

See Attachment A for the Final Renewed Title V Operating Permit.

### XII. ATTACHMENTS

- A. Draft Renewal Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List

# **ATTACHMENT A**

Draft Renewed Title V Operating Permit

**FACILITY:** S-8454-0-2

EXPIRATION

# **FACILITY-WIDE REQUIREMENTS**

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later 1. than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Kern County Rule 111] Federally Enforceable Through Title V Permit
- The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; Kern County Rule 111] Federally Enforceable Through Title V Permit
- {2287} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA, Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
- {2290} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- {2291} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- {2292} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- {2293} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9-42] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
acility-wide Requirements that affect specific These terms and conditions are part of the Facility-wide Remail Permit Units may constitute modification of those Permit Units

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORF

Location: LIGHT OIL WESTERN S-8454-0-2, Dec 19 2017 11:12AM – RAMIREZH

- 10. {2294} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. {2295} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. {2296} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. {2297} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. {2298} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. {2299} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. {2300} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. {2301} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. {2302} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted. or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. {2303} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. {2304} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V **Permit**
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit

  FACILITY WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. {2310} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. {2311} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. {2312} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04), [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. {2319} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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

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- 36. {2320} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. {2321} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. {2322} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. {2323} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. Operator shall maintain accurate monthly records of Gas-to-oil ratio (GOR) and API gravity of liquids produced showing that facility exclusively processes, stores, or transfers black oil (as defined in 40 CFR 63.761). [40 CFR 63.10(b)] Federally Enforceable Through Title V Permit
- 44. {3321} The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting reinspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 45. {3506} For valves, threaded connections, flanges, pipes, pumps, compressors, and other components subject to the requirements of Rule 4409, but not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 46. {3323} For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

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- 47. {3324} For polished rod stuffing boxes (PRSBs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 48. {3325} Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit
- 49. {3326} Minor gas leaks from PRSBs detected during any District inspection shall not be counted toward determination of compliance with this rule provided the permittee repairs, replaces, or removes leaking PRSBs from VOC service as soon as practicable but not later than seven calendar days. [District Rule 4409, 5.1.3.1.2] Federally Enforceable Through Title V Permit
- 50. {3327} Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit
- 51. {3328} Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit
- 52. {3329} An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit
- 53. {3330} A leak from a component is when there is a major liquid leak from the component. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit
- 54. {3331} A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit
- 55. {3332} A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 56. {3333} When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 57. {3334} When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

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- 58. {3335} When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 59. {3336} When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 60. {3337} When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 61. {3338} When 200 or fewer PRSBs are inspected, a leak is when more than four have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 PRSBs are inspected, a leak is when more than 2.0 % (rounded up to the nearest whole number) of the PRSBs have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 62. {3339} When 200 or fewer wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than two or more pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than 1.0 % (rounded up to the nearest whole number) of the pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 63. {3340} When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 64. {3341} For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audiovisually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit
- 65. {3342} For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit
- 66. {3343} All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit
- 67. {3344} Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit
- 68. {3345} All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit
- 69. {3346} All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit
- 70. {3347} All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

- 71. {3348} All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit
- 72. {3349} All pipes, in service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit
- 73. {3350} The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non-Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit
- 74. {3351} Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit
- 75. {3352} The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit
- 76. {3353} A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit
- 77. {3354} Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit
- 78. {3355} District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit
- 79. {3356} The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

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- 80. {3357} The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit
- 81. {3358} The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit
- 82. {3359} For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit
- 83 {3360} If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit
- 84. {3361} For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

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- 85. {3362} All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit
- 86. {3363} The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit
- 87. {3364} By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit
- 88. {3365} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit
- 89. {3366} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and reinspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit
- 90. {3367} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit
- 91. {3368} All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit
- 92. {3369} All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit
- 93. {3370} The VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit
- 94. {3371} The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit

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- 95. {3372} The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit
- 96. {3373} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit
- 97. {3374} The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25 a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit
- 98. {3375} Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit
- 99. Facilities S-1216, S-382, S-1738, S-8282, and S-8454 constitute one stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: CALIFORNIA RESOURCES PRODUCTION
Location: LIGHT OIL WESTERN
\$-8464-0-2 Dec 13 2017 11 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-1-2

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#5) EQUIPPED WITH VAREC VAPOR CONTROL SYSTEM

INCLUDING VAPOR COMPRESSOR SHARED WITH S-8454-2, '-3, '-4, & '-5 (LAYMAN)

# PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in liquid service, tank vapor space, vapor piping to vapor recovery system manifold, and vapor recovery system shall not exceed 19.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks. and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT ONTINUE ON NEXT PAGE These terms and conditions

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP LIGHT OIL WESTERN

Location: LIGHT OIL WES S-8454-1-2 Dec 13 2017 11:12AM - RAMIREZH

- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Formerly S-2804-1.
- 16. Formerly S-1738-417.

Facility Name: CALIFORNIA RESOURCES PRODUCTION ( Location: LIGHT OIL WESTERN 5-8464-1-2 Dec 13 2017 11 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-2-2

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#6) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED

ON PERMIT UNIT S-8454-1 (LAYMAN)

# PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in liquid service, tank vapor space, and vapor piping to vapor recovery system manifold shall not exceed 10.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT RECLUREMENTS CONTINUE ON NEXT PAGE
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Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP

Location: LIGHT OIL WESTERN 8-8454-2-2 Dec 13 2017 11:12AM – RAMIREZH

- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Formerly S-2804-2.
- 16. Formerly S-1738-418.

Facility Name: CALIFORNIA RESOURCES PRODUCTION Location: LIGHT OIL WESTERN 8-8454-2-2 Date 13 2017 11, 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-3-2

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#36) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON

PERMIT UNIT S-8454-1 (LAYMAN)

# PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP

Location: LIGHT OIL WESTERN 8-8454-3-2 Dec 13 2017 11:12AM – RAMIREZH

- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-3.
- 15. Formerly S-1738-419.

Facility Name: CALIFORNIA RESOURCES PRODUCTION ( Location: LIGHT OIL WESTERN S-4454-3-2 Dec 13 2017 11 12AM - RAMREZH

**PERMIT UNIT:** S-8454-4-2

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,500 BBL FIXED ROOF CRUDE OIL WASH TANK (#51) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON

PERMIT UNIT S-8454-1 (LAYMAN)

# PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP

Location: LIGHT OIL WESTERN 8-8454-4-2 Dec 13 2017 11"12AM – RAMIREZH

- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-5.
- 15. Formerly S-1738-420.

Facility Name: CALIFORNIA RESOURCES PRODUCTION LOcation: LIGHT OIL WESTERN

**PERMIT UNIT:** S-8454-5-2

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

190 BBL CRUDE OIL TEST TANK (#2) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-

8454-1(LAYMAN)

# PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP LIGHT OIL WESTERN

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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-8.
- 15. Formerly S-1738-421.

Facility Name: CALIFORNIA RESOURCES PRODUCTION Location: LIGHT OIL WESTERN S-8454-5-2 Dec 13 2017 11 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-6-2

SECTION: NE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

10 MMBTU/HR WASTE GAS FLARE WITH SULFUR REMOVAL VESSELS USED TO INCINERATE PRODUCED GAS, AND VAPORS FROM TANK VAPOR CONTROL SYSTEM LISTED ON S-8454-1 (LAYMAN TANK BATTERY)

# PERMIT UNIT REQUIREMENTS

- 1. Operation shall include 25 foot tall Mactronic elevated waste gas flare with 1 h.p. air assist combustion blower and electronic pilot light re-ignition system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Gas line to flare shall be equipped with an operational volumetric flow rate indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Pilot light shall be lit and fully extended to ignition position prior to routing waste gas to flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Total gas flow rate to flare shall not exceed 300,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Operator shall immediately utilize air assisted combustion if flare exhibits smoke greater than 0% opacity. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 6. Emission rates shall not exceed any of the following: NOx (as NO2) 0.068 lb/MMBtu, VOC 0.034 lb/MMBtu, PM10 7.6 lb/MMscf, or CO 0.370 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. SOx (as SO2) emission rate shall not exceed 112.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall measure and record the total volume of gas flared. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Measurement of gas sulfur content (H2S) shall be conducted at least once annually. If the result of the annual measurement demonstrates that the unit does not meet the applicable emission limits, the measurement frequency shall revert to once every month until three (3) consecutive measurements show compliance with the applicable emission limits, at which time measurement frequency may revert back to once annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain records of amount of total gas flared, annual records (or monthly records as required by this permit) of sulfur content of gas, and calculated average daily SO2 emissions. Records shall be kept for a minimum of 5 years and shall be made readily available for District inspection upon request. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit

12. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] 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.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN

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- 13. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
- 14. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
- 15. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain a copy of the approved flare minimization plan pursuant to Section 6.5 and a copy of annual reports submitted to the APCO pursuant to Section 6.2. [District Rule 4311] Federally Enforceable Through Title V Permit
- 17. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
- 18. The operator shall submit an updated flare minimization plan every five years after the initial submittal, or prior to installation of new or modified equipment, pursuant to Section 6.5 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain, and make available for District inspection, all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4311] Federally Enforceable Through Title V Permit
- 20. Formerly S-1738-427.
- 21. Formerly S-2804-19.

Facility Name: CALIFORNIA RESOURCES PRODUCTION Location: LIGHT OIL WESTERN 5-8465-6-2 Dec 13 2017 11 124M - RAMIREZH

**PERMIT UNIT:** S-8454-7-2

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL WASH TANK SERVED BY A VAPOR RECOVERY SYSTEM INCLUDING

COMPRESSOR AND PIPING SHARED WITH S-8454-8 AND S-8454-9 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the components in gas service on tank shall not exceed 12.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count and emissions calculations for tank and vapor recovery system according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall visually inspect the vapor recovery system and the tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit

These terms and conditions

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IREMENTS CONTINUE ON NEXT PAGE are part of the Facility-wide Permit to Operate. PERMIT UNIT REQUIREMENTS

- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMITURE REQUIREMENTS CONTINUE ON NEXT PAGE
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- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-432.

Facility Name: CALIFORNIA RESOURCES PRODUCTION C Location: LIGHT OIL WESTERN 8-8454-7-2 Dec 13 2017 11 12AM RAIMIREZH

**PERMIT UNIT: S-8454-8-2** 

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10618) VENTED TO THE VAPOR RECOVERY SYSTEM

LISTED ON PERMIT S-8454-7 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation, [District Rule 4623] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the components in gas service on tank shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count and emissions calculations for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. District Rule 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit

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- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

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

- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-433.

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**PERMIT UNIT:** S-8454-9-2

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10617) VENTED TO THE VAPOR RECOVERY SYSTEM

LISTED ON PERMIT S-8454-7 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the components in gas service on tank shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate component count and emissions calculations for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
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- Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2001 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
  These terms and conditions are part of the Facility-wide Permit to Operate.

  Location: LIGHT OIL WESTERN with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-434.

Facility Name: CALIFORNIA RESOURCES PRODUCTION C Location: LIGHT OIL WESTERN S-8454-9-2 Dec 13 2017 1112AM - RAMIREZH

**PERMIT UNIT:** S-8454-12-2

SECTION: 04 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13967 SERVED BY A PRESSURE RELIEF VALVE (NEW YORK

LEASE)

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard 2. Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
- For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V **Permit**
- Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

ONTINUE ON NEXT PAGE are part of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP LIGHT OIL WESTERN Location: 454-12-2 Dec 13 2017 11:12AM - RAMIREZE

PERMIT UNIT REQUIREMENT

- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 17. Formerly S-1627-12-0.
- 18. Formerly S-1738-437.

Facility Name: CALIFORNIA RESOURCES PRODUCTION C Location: LIGHT OIL WESTERN s-8454-12-2 Dec 13 2017 11 12AM – RAMIREZH

**PERMIT UNIT:** S-8454-13-2

SECTION: 04 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13968 SERVED BY A PRESSURE RELIEF VALVE (NEW YORK

LEASE)

### PERMIT UNIT REQUIREMENTS

This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.5 psia under all 1. storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit

- The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard 2. Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
- For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP

: LIGHT OIL WESTERN Dec 13 2017 11:12AM - RAMIREZH Location:

- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 17. Formerly S-1627-13-0.
- 18. Formerly S-1738-438.

Facility Name: CALIFORNIA RESOURCES PRODUCTION C Location: LIGHT OIL WESTERN 8-8454-13-2 Obe 13 2017 11 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-20-1

#### **EQUIPMENT DESCRIPTION:**

25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM\GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE)

### PERMIT UNIT REQUIREMENTS

- This unit is permitted as S-1326-443, S-1327-210, and S-8454-20 and is approved to operate in California Resources 1. Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit shall only use public utility supplied power for its electrical needs. [District Rule 2201] Federally Enforceable Through Title V Permit
- The unit shall not operate within 100 meters of the facility boundary. [District Rule 4102]
- Unit shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6] 4.
- Permittee shall notify the District Compliance Division to arrange a start-up inspection at the initial location of the 5. unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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]
- Unit shall only be fired on gaseous fuel that includes PUC-quality natural gas, propane, waste/field gas, and TEOR gas or a mixture of any of these fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Sulfur content of PUC-quality natural gas, waste/field gas, TEOR gas, or a mixture of these fuels shall not exceed 1.0 grain per 100 dry standard cubic feet or shall be treated to remove at least 95% by weight of sulfur compounds. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.016 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP LIGHT OIL WESTERN

8454-20-1 Dec 13 2017 11 12AM - RAMIREZH

- 13. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Source testing and/or stack monitoring prescribed in this permit shall not be required while this equipment is in storage or is located outside of the jurisdiction of the San Joaquin Valley Air Pollution Control District. Upon reactivation from storage or relocation of this equipment within the jurisdiction of the SJVUAPCD, normal source testing and/or stack monitoring shall recommence. If a source test is postponed due to the equipment being in storage or located outside of SJVAPCD jurisdiction, a source test shall be conducted within 60 days of recommencing operation within the jurisdiction of the SJVUAPCD. [District Rules 201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. If and when this unit is fired on LPG/propane, source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of first firing on the LPG/propane fuel. Additional source testing when firing on LPG/propane fuel is not required, but may be conducted and used by the operator to satisfy the applicable twelve (12) month or thirty-six (36) month periodic testing required by this permit. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name CALIFORNIA RESOURCES PRODUCTION CO

Location: LIGHT OIL WESTERN S-8454-20-1 Dec 13 2017 11 12AM - RAMIREZH

- 25. The operator shall determine within 60 days of first use and annually thereafter the fuel sulfur content of each source of unregulated natural gas fuel combusted in this unit using EPA Method 11 or 15, or ASTM Method D1072, D3246 or D6228 or double GC with mercaptans. In lieu of fuel sulfur content testing, the operator may conduct a source test for combustion SOx emissions within 60 days of startup and at least once every 12 months thereafter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. If the unit is fired on regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. If the unit is not fired solely on regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Sulfur content testing is not required for propane. [District Rule 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 30. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. 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 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. Formerly S-1738-493.

Facility Name: CALIFORNIA RESOURCES PRODUCTION C Location: LIGHT OIL WESTERN 8-8454-20-1 Dec 13 2017 11:124M – RAMIREZH

**PERMIT UNIT:** S-8454-21-1

EXPIRATION DAITE: 02/28/2018

#### **EQUIPMENT DESCRIPTION:**

25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE)

### PERMIT UNIT REQUIREMENTS

- 1. This unit is permitted as S-1326-435, S-1327-208, and S-8454-21 and is approved to operate in California Resources Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This unit shall only use public utility supplied power for its electrical needs. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The unit shall not operate within 100 meters of the facility boundary. [District Rule 4102]
- 4. Unit shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
- 5. Permittee shall notify the District Compliance Division to arrange a start-up inspection at the initial location of the unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 6. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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]
- 9. Unit shall only be fired on gaseous fuel that includes PUC-quality natural gas, propane, waste/field gas, and TEOR gas or a mixture of any of these fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Sulfur content of PUC-quality natural gas, waste/field gas, TEOR gas, or a mixture of these fuels shall not exceed 1.0 grain per 100 dry standard cubic feet or shall be treated to remove at least 95% by weight of sulfur compounds. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.016 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

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- 13. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Source testing and/or stack monitoring prescribed in this permit shall not be required while this equipment is in storage or is located outside of the jurisdiction of the San Joaquin Valley Air Pollution Control District. Upon reactivation from storage or relocation of this equipment within the jurisdiction of the SJVUAPCD, normal source testing and/or stack monitoring shall recommence. If a source test is postponed due to the equipment being in storage or located outside of SJVAPCD jurisdiction, a source test shall be conducted within 60 days of recommencing operation within the jurisdiction of the SJVUAPCD. [District Rules 201, 4305, 4306, and 4320] Federally Enforceable Through Title V **Permit**
- 16. If and when this unit is fired on LPG/propane, source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of first firing on the LPG/propane fuel. Additional source testing when firing on LPG/propane fuel is not required, but may be conducted and used by the operator to satisfy the applicable twelve (12) month or thirty-six (36) month periodic testing required by this permit. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: CALIFORNIA RESOURCES PRODUCTION CO LIGHT OIL WESTERN

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- 25. The operator shall determine within 60 days of first use and annually thereafter the fuel sulfur content of each source of unregulated natural gas fuel combusted in this unit using EPA Method 11 or 15, or ASTM Method D1072, D3246 or D6228 or double GC with mercaptans. In lieu of fuel sulfur content testing, the operator may conduct a source test for combustion SOx emissions within 60 days of startup and at least once every 12 months thereafter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. If the unit is fired on regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. If the unit is not fired solely on regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Sulfur content testing is not required for propane. [District Rule 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 30. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. 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 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. Formerly S-1738-466

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### **ATTACHMENT B**

Previous Title V Operating Permit

**FACILITY:** S-8454-0-1 **EXPIRATION DATE:** 02/28/2018

### **FACILITY-WIDE REQUIREMENTS**

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Kern County Rule 111] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; Kern County Rule 111] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. Operator shall maintain accurate monthly records of Gas-to-oil ratio (GOR) and API gravity of liquids produced showing that facility exclusively processes, stores, or transfers black oil (as defined in 40 CFR 63.761). [40 CFR 63.10(b)] Federally Enforceable Through Title V Permit
- 44. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 45. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components subject to the requirements of Rule 4409, but not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 46. For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit
- 47. For polished rod stuffing boxes (PRSBs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

- 48. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit
- 49. Minor gas leaks from PRSBs detected during any District inspection shall not be counted toward determination of compliance with this rule provided the permittee repairs, replaces, or removes leaking PRSBs from VOC service as soon as practicable but not later than seven calendar days. [District Rule 4409, 5.1.3.1.2] Federally Enforceable Through Title V Permit
- 50. Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit
- 51. Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit
- 52. An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit
- 53. A leak from a component is when there is a major liquid leak from the component. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit
- 54. A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit
- 55. A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 56. When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 57. When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 58. When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

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

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- 59. When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 60. When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 61. When 200 or fewer PRSBs are inspected, a leak is when more than four have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 PRSBs are inspected, a leak is when more than 2.0 % (rounded up to the nearest whole number) of the PRSBs have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 62. When 200 or fewer wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than two or more pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than 1.0 % (rounded up to the nearest whole number) of the pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 63. When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 64. For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit
- 65. For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit
- 66. All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit
- 67. Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit
- 68. All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit
- 69. All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit
- 70. All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit
- 71. All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

- 72. All pipes, in service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit
- 73. The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non-Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit
- 74. Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit
- 75. The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit
- 76. A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit
- 77. Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit
- 78. District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit
- 79. The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit
- 80. The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

- 81. The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit
- 82. For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit
- 83. If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit
- 84. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit
- 85. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit
- 86. The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit
- 87. By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

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- 88. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmy, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit
- 89. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and reinspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit
- 90. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit
- 91. All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit
- 92. All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit
- 93. The VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit
- 94. The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit
- 95. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit
- 96. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit
- 97. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit

Facility-wide Requirements for S-8454-0-1 (continued)

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- 98. Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit
- 99. Facilities S-1216, S-382, S-1738, S-8282, and S-8454 constitute one stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-8454-1-1** 

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

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#5) EQUIPPED WITH VAREC VAPOR CONTROL SYSTEM INCLUDING VAPOR COMPRESSOR SHARED WITH S-8454-2, '-3, '-4, & '-5 (LAYMAN)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in liquid service, tank vapor space, vapor piping to vapor recovery system manifold, and vapor recovery system shall not exceed 19.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Formerly S-2804-1.
- 16. Formerly S-1738-417.

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**PERMIT UNIT: S-8454-2-1** 

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

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#6) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-8454-1 (LAYMAN)

#### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions rate, calculated using EPA Publication 453/R-95-017," Table 2-4 Oil and Gas Operations Average Emission Factors, from the total number of components in liquid service, tank vapor space, and vapor piping to vapor recovery system manifold shall not exceed 10.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Formerly S-2804-2.
- 16. Formerly S-1738-418.

**PERMIT UNIT: S-8454-3-1** 

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

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#36) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT UNIT S-8454-1 (LAYMAN)

#### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-3.
- 15. Formerly S-1738-419.

**PERMIT UNIT:** S-8454-4-1

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

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

1,500 BBL FIXED ROOF CRUDE OIL WASH TANK (#51) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON

PERMIT UNIT S-8454-1 (LAYMAN)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-5.
- 15. Formerly S-1738-420.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN S.8854-4.1 Dec 13 2017 II 12M - RAMIREZH

**PERMIT UNIT: S-8454-5-1** 

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

SECTION: SE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

190 BBL CRUDE OIL TEST TANK (#2) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-8454-1(LAYMAN)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. There shall be no leaks in excess of 10,000 ppmv when measured with an portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a violation of this permit. [District Rule 2201 & 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Formerly S-2804-8.
- 15. Formerly S-1738-421.

**PERMIT UNIT:** S-8454-6-1

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

SECTION: NE18 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

10 MMBTU/HR WASTE GAS FLARE WITH SULFUR REMOVAL VESSELS USED TO INCINERATE PRODUCED GAS, AND VAPORS FROM TANK VAPOR CONTROL SYSTEM LISTED ON S-8454-1 (LAYMAN TANK BATTERY)

### PERMIT UNIT REQUIREMENTS

- 1. Operation shall include 25 foot tall Mactronic elevated waste gas flare with 1 h.p. air assist combustion blower and electronic pilot light re-ignition system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Gas line to flare shall be equipped with an operational volumetric flow rate indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Pilot light shall be lit and fully extended to ignition position prior to routing waste gas to flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Total gas flow rate to flare shall not exceed 300,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Operator shall immediately utilize air assisted combustion if flare exhibits smoke greater than 0% opacity. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 6. Emission rates shall not exceed any of the following: NOx (as NO2) 0.068 lb/MMBtu, VOC 0.034 lb/MMBtu, PM10 7.6 lb/MMscf, or CO 0.370 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. SOx (as SO2) emission rate shall not exceed 112.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall measure and record the total volume of gas flared. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Measurement of gas sulfur content (H2S) shall be conducted at least once annually. If the result of the annual measurement demonstrates that the unit does not meet the applicable emission limits, the measurement frequency shall revert to once every month until three (3) consecutive measurements show compliance with the applicable emission limits, at which time measurement frequency may revert back to once annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain records of amount of total gas flared, annual records (or monthly records as required by this permit) of sulfur content of gas, and calculated average daily SO2 emissions. Records shall be kept for a minimum of 5 years and shall be made readily available for District inspection upon request. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- 12. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit

- 13. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
- 14. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
- 15. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain a copy of the approved flare minimization plan pursuant to Section 6.5 and a copy of annual reports submitted to the APCO pursuant to Section 6.2. [District Rule 4311] Federally Enforceable Through Title V Permit
- 17. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
- 18. The operator shall submit an updated flare minimization plan every five years after the initial submittal, or prior to installation of new or modified equipment, pursuant to Section 6.5 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain, and make available for District inspection, all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4311] Federally Enforceable Through Title V Permit
- 20. Formerly S-1738-427.
- 21. Formerly S-2804-19.

**PERMIT UNIT: S-8454-7-1** 

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

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL WASH TANK SERVED BY A VAPOR RECOVERY SYSTEM INCLUDING COMPRESSOR AND PIPING SHARED WITH S-8454-8 AND S-8454-9 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. VOC fugitive emissions from the components in gas service on tank shall not exceed 12.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate component count and emissions calculations for tank and vapor recovery system according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect the vapor recovery system and the tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit

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- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-432.

**PERMIT UNIT:** S-8454-8-1

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

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10618) VENTED TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-8454-7 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. VOC fugitive emissions from the components in gas service on tank shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate component count and emissions calculations for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201 and 4623, Table 3] 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.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN S-8464-8-1 Dec 13 2017 11:12AM - RAMIREZH

- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-433.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN 8-8454-8-1. Dec 13 2017 11:124M - RAMIREZH

**PERMIT UNIT:** S-8454-9-1 **EXPIRATION DATE:** 02/28/2018

SECTION: SE08 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10617) VENTED TO THE VAPOR RECOVERY SYSTEM

LISTED ON PERMIT S-8454-7 (SUNSET LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 2. All piping valves and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. VOC fugitive emissions from the components in gas service on tank shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate component count and emissions calculations for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623, Table 3] 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.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN S-8494-9-1 Dec 13 2017 11:12AM - RAMIREZH

- 9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2001 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
- 13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rules 4623, Table 3] Federally Enforceable Through Title V Permit
- 14. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. This tank shall be degassed before commencing interior cleaning by following one of the following options: 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

Location: LIGHT OIL WESTERN 8-8454-9-1 Dec 13 2017 11 12AM – RAMIREZH

- 19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. If the tank holds an organic liquid having a TVP of 1.5 psia or greater, then operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. Formerly S-1738-434.

**PERMIT UNIT:** S-8454-12-1

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

**SECTION: 04 TOWNSHIP: 11N RANGE: 23W** 

**EQUIPMENT DESCRIPTION:** 

ONE 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13967 SERVED BY A PRESSURE RELIEF VALVE (NEW

YORK LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 17. Formerly S-1627-12-0.
- 18. Formerly S-1738-437.

**PERMIT UNIT: S-8454-13-1** 

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

SECTION: 04 TOWNSHIP: 11N RANGE: 23W

**EQUIPMENT DESCRIPTION:** 

ONE 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13968 SERVED BY A PRESSURE RELIEF VALVE (NEW

YORK LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
- 5. This tank shall be in a leak-free condition. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] 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.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN
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- 8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 17. Formerly S-1627-13-0.
- 18. Formerly S-1738-438.

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN 8-8464-13-1 Oec 19 2017 11 12AM - RAMIREZH

**PERMIT UNIT:** S-8454-20-0

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

### **EQUIPMENT DESCRIPTION:**

25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE)

### PERMIT UNIT REQUIREMENTS

- 1. This unit is permitted as S-1326-443, S-1327-210, S-8567-2 and S-8454-20 and is approved to operate in California Resources Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This unit shall only use public utility supplied power or IC engine powered electrical generators S-1738-494 and '495 for its electrical needs. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The unit shall not operate within 100 meters of the facility boundary. [District Rule 4102]
- 4. Unit shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
- 5. Permittee shall notify the District Compliance Division to arrange a start-up inspection at the initial location of the unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 6. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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]
- 9. Unit shall only be fired on gaseous fuel that includes PUC-quality natural gas, propane, waste/field gas, and TEOR gas or a mixture of any of these fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Sulfur content of PUC-quality natural gas, waste/field gas, TEOR gas, or a mixture of these fuels shall not exceed 1.0 grain per 100 dry standard cubic feet or shall be treated to remove at least 95% by weight of sulfur compounds.

  [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.016 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN S-8454-20-0: Dec 13 2017 11:12AM – RAMIREZH

- 13. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Source testing and/or stack monitoring prescribed in this permit shall not be required while this equipment is in storage or is located outside of the jurisdiction of the San Joaquin Valley Air Pollution Control District. Upon reactivation from storage or relocation of this equipment within the jurisdiction of the SJVUAPCD, normal source testing and/or stack monitoring shall recommence. If a source test is postponed due to the equipment being in storage or located outside of SJVAPCD jurisdiction, a source test shall be conducted within 60 days of recommencing operation within the jurisdiction of the SJVUAPCD. [District Rules 201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. If and when this unit is fired on LPG/propane, source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of first firing on the LPG/propane fuel. Additional source testing when firing on LPG/propane fuel is not required, but may be conducted and used by the operator to satisfy the applicable twelve (12) month or thirty-six (36) month periodic testing required by this permit. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 25. The operator shall determine within 60 days of first use and annually thereafter the fuel sulfur content of each source of unregulated natural gas fuel combusted in this unit using EPA Method 11 or 15, or ASTM Method D1072, D3246 or D6228 or double GC with mercaptans. In lieu of fuel sulfur content testing, the operator may conduct a source test for combustion SOx emissions within 60 days of startup and at least once every 12 months thereafter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. If the unit is fired on regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V-Permit
- 27. If the unit is not fired solely on regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Sulfur content testing is not required for propane. [District Rule 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 30. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. 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 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. Formerly S-1738-493.

**PERMIT UNIT:** S-8454-21-0

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

### **EQUIPMENT DESCRIPTION:**

25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE)

### PERMIT UNIT REQUIREMENTS

- 1. This unit is permitted as S-1326-435, S-1327-208, S-8567-3 and S-8454-21 and is approved to operate in California Resources Production Corporation's and California Resources Elk Hills, LLC's, or its subsidiary's, Light and Heavy Oil Western and Central stationary sources. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This unit shall only use public utility supplied power or IC engine powered electrical generators S-1738-494 and '495 for its electrical needs. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The unit shall not operate within 100 meters of the facility boundary. [District Rule 4102]
- 4. Unit shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
- 5. Permittee shall notify the District Compliance Division to arrange a start-up inspection at the initial location of the unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 6. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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]
- 9. Unit shall only be fired on gaseous fuel that includes PUC-quality natural gas, propane, waste/field gas, and TEOR gas or a mixture of any of these fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Sulfur content of PUC-quality natural gas, waste/field gas, TEOR gas, or a mixture of these fuels shall not exceed 1.0 grain per 100 dry standard cubic feet or shall be treated to remove at least 95% by weight of sulfur compounds. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.016 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

Facility Name: CALIFORNIA RESOURCES PRODUCTION CORP Location: LIGHT OIL WESTERN 9-8454-21-0 : Dee 13 2017 1 ::12AM – RAMIREZH

- 13. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Source testing and/or stack monitoring prescribed in this permit shall not be required while this equipment is in storage or is located outside of the jurisdiction of the San Joaquin Valley Air Pollution Control District. Upon reactivation from storage or relocation of this equipment within the jurisdiction of the SJVUAPCD, normal source testing and/or stack monitoring shall recommence. If a source test is postponed due to the equipment being in storage or located outside of SJVAPCD jurisdiction, a source test shall be conducted within 60 days of recommencing operation within the jurisdiction of the SJVUAPCD. [District Rules 201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. If and when this unit is fired on LPG/propane, source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of first firing on the LPG/propane fuel. Additional source testing when firing on LPG/propane fuel is not required, but may be conducted and used by the operator to satisfy the applicable twelve (12) month or thirty-six (36) month periodic testing required by this permit. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 25. The operator shall determine within 60 days of first use and annually thereafter the fuel sulfur content of each source of unregulated natural gas fuel combusted in this unit using EPA Method 11 or 15, or ASTM Method D1072, D3246 or D6228 or double GC with mercaptans. In lieu of fuel sulfur content testing, the operator may conduct a source test for combustion SOx emissions within 60 days of startup and at least once every 12 months thereafter. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. If the unit is fired on regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. If the unit is not fired solely on regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Sulfur content testing is not required for propane. [District Rule 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 30. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. 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 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. Formerly S-1738-466

## ATTACHMENT C

**Detailed Facility List** 

# SJVUAPCD SOUTHERN

# Detailed Facility Report

For Facility=8454 and excluding Deleted Permits Sorted by Facility Name and Permit Number

1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#36) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT UNIT S-8454-1 1,500 BBL FIXED ROOF CRUDE OIL WASH TANK (#51) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-8454-1 10 MMBTU/HR WASTE GAS FLARE WITH SULFUR REMOVAL VESSELS USED TO INCINERATE PRODUCED GAS, AND VAPORS FROM TANK VAPOR CONTROL SYSTEM LISTED ON S-8454-1 (LAYMAN TANK 500 BBL FIXED ROOF CRUDE OIL WASH TANK SERVED BY A VAPOR RECOVERY SYSTEM INCLUDING COMPRESSOR AND PIPING SHARED WITH S-8454-8 AND S-8454-9 (SUNSET LEASE) 25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE) 1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#6) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-8454-1 02/28/2018 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10618) VENTED TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-8454-7 (SUNSET LEASE) 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK (TANK #10617) VENTED TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-8454-7 (SUNSET LEASE) 1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK (#5) EQUIPPED WITH VAREC VAPOR CONTROL SYSTEM INCLUDING VAPOR COMPRESSOR SHARED WITH S-8454-2, '-3, '-4, & '-5 (LAYMAN) 190 BBL CRUDE OIL TEST TANK (#2) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-8454-1(LAYMAN) 5/ ONE 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13968 SERVED BY A PRESSURE RELIEF VALVE (NEW YORK LEASE) ONE 500 BBL FIXED ROOF CRUDE OIL STORAGE TANK #13967 SERVED BY A PRESSURE RELIEF VALVE (NEW YORK LEASE) INSP. DATE: EXPIRE ON: AREA: TitleV 60333 TYPE: TOXIC ID: **EQUIPMENT DESCRIPTION** BATTERY LAYMAN) LAYMAN) LAYMAN) STATUS PERMIT ∢ ⋖ ⋖ ⋖ ⋖ ⋖ ⋖ ⋖ ⋖ ⋖ ⋖ ∢ 149.00 893.00 149.00 149.00 0.00 149.00 103.00 149.00 149.00 149.00 149.00 203.00 TOTAL \$ 8454 4 149.00 149.00 149.00 149.00 0.00 149.00 103.00 893.00 149.00 149.00 149.00 203.00 **AMOUNT** 빒 STATUS: TELEPHONE: FAC# ğ FEE RULE 3020-02 G 3020-05 D  $\alpha$ 3020-05 C 3020-05 66-666 CALIFORNIA RESOURCES PRODUCTION CORP LIGHT OIL WESTERN FEE DESCRIPTION 21,000 gallon 42,000 gallon 42,000 gallon 63,000 gallon 21,000 gallon 21,000 gallon 21,000 gallon 42,000 gallor 21,000 gallor 10 MMbtu/hr 25 MMbtu/hr 7980 gallon **PERMIT NUMBER** S-8454-20-0 S-8454-13-1 S-8454-12-S-8454-1-1 S-8454-5-1 S-8454-7-1 S-8454-2-1 S-8454-4-1 S-8454-6-1 S-8454-3-1 S-8454-8-1 S-8454-9-1

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**Detailed Facility Report** 

For Facility=8454 and excluding Deleted Permits
Sorted by Facility Name and Permit Number
FEE PERMIT

0.00

66-666

PERMIT NUMBER FEE DESCRIPTION

SJVUAPCD SOUTHERN

25 MMBtu/hr

S-8454-21-0

PERMIT TOTAL AMOUNT ΩT FEE RULE

25 MMBTU/HR NATURAL GAS/TEOR GAS/FIELD GAS/PROPANE FIRED PORTABLE STEAM GENERATOR WITH NORTH AMERICAN LE, COEN QLN-11 BURNER AND FLUE GAS RECIRCULATION (VARIOUS UNSPECIFIED LOCATIONS WITHIN LIGHT OIL WESTERN STATIONARY SOURCE) **EQUIPMENT DESCRIPTION** 4 0.00

Number of Facilities Reported: 1